

Oracle® DIVArchive

WS API Reference Manual

Release 7.3

E64046-02

September 2015

Copyright © 2015, Oracle and/or its affiliates. All rights reserved.

Primary Author: Lou Bonaventura

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

Table of Contents

1 INTRODUCTION	1
1.1 DOCUMENT CONVENTIONS.....	1
1.2 DEFINITIONS, ACRONYMS AND SPECIAL TERMS.....	2
1.3 OVERVIEW	5
1.4 TECHNOLOGIES.....	7
1.5 DEVELOPMENT PREREQUISITES	10
2 DIVARCHIVE API USAGE AND OPERATIONS.....	11
2.1 XML ENCODING	11
2.2 XML NAMESPACES AND PREFIXES	12
2.3 REQUEST BUILDING AND DATA STRUCTURES MANAGEMENT	14
2.4 SESSION MANAGEMENT	17
2.5 DIVARCHIVE VERSION COMPATIBILITY.....	18
2.6 ALTERNATE APIS	19
2.7 RESTFUL INTERFACING WITH THE DIVARCHIVE WS.....	20
2.8 SESSION MANAGEMENT COMMANDS	23
2.8.1 <i>registerClient</i>	23
2.9 SOAP FAULTS	26
2.10 QUALITY OF SERVICE (QOS).....	28
2.11 REQUESTS AND COMMANDS	29
2.11.1 <i>addGroup</i>	31
2.11.2 <i>addGroupShort</i>	34
2.11.3 <i>archiveObject</i>	37
2.11.4 <i>associativeCopy</i>	42
2.11.5 <i>cancelRequest</i>	46
2.11.6 <i>changeRequestPriority</i>	48
2.11.7 <i>copy</i> or <i>copyToGroup</i>	51
2.11.8 <i>copyToNewObject</i>	57
2.11.9 <i>deleteGroup</i>	62
2.11.10 <i>deleteInstance</i>	64
2.11.11 <i>deleteInstancebyMediaName</i>	68
2.11.12 <i>deleteObject</i>	71
2.11.13 <i>ejectTape</i>	74
2.11.14 <i>enableAutomaticRepack</i>	77
2.11.15 <i>getArchiveSystemInfo</i>	79
2.11.16 <i>getArrayList</i>	86
2.11.17 <i>getFinishedRequestList</i>	90

2.11.18	<i>getFilesAndFolders</i>	98
2.11.19	<i>getGroupsList</i>	103
2.11.20	<i>getObjectDetailsList</i>	106
2.11.20.1	Usage with DIVAnet Access Gateway	115
2.11.20.2	Usage and Recommended Practice	115
2.11.20.3	Recommended Practices for Continuous Updates Notification Design Pattern (No Media Filter).....	117
2.11.21	<i>getObjectInfo</i>	124
2.11.22	<i>getPartialRestoreRequestInfo</i>	130
2.11.23	<i>getRequestInfo</i>	135
2.11.23.1	<i>additionalInfo</i>	142
2.11.24	<i>getSourceDestinationList</i>	144
2.11.25	<i>getStoragePlanList</i>	148
2.11.26	<i>getTapeInfo</i>	150
2.11.27	<i>insertTape</i>	154
2.11.28	<i>insertTapeShort</i>	157
2.11.29	<i>linkObjects</i>	160
2.11.30	<i>lockObject</i>	163
2.11.31	<i>multipleRestoreObject</i>	165
2.11.32	<i>partialRestore</i>	170
2.11.33	<i>release</i>	181
2.11.34	<i>require</i>	184
2.11.35	<i>restoreInstance</i>	187
2.11.36	<i>restoreObject</i>	192
2.11.37	<i>transcodeArchive</i>	197
2.11.38	<i>transferFiles</i>	202
2.11.39	<i>unlockObject</i>	206

APPENDIX 208

A1	LIST OF SPECIAL AUTHORIZED CHARACTERS IN DIVARCHIVE	208
A2	MAXIMUM NUMBER CHARACTERS ALLOWED.....	209
A3	DIVARCHIVE WS STATUS CODES	210

Tables Index

Table 1: Definitions, Acronyms, and Special Terms	2
Table 2: Files Delivered with DIVArchive WS API Package.....	6
Table 3: Web Services Technologies	8
Table 4: WS-I Compliant Standards	9
Table 5: Framework Types for Integration of DIVArchive WS.....	9

Table 6: DIVArchive WS Compatibility	18
Table 7: Quality of Service Levels, Values, and Descriptions	28
Table 8: Additional/Optional QOS Values.....	28
Table 9: Generic Status Codes for all Commands.....	30

Figures Index

Figure 1: Non-Screenshot Drawing Displaying Drawing Styles.....	1
Figure 2: DIVAS 2.2 Integration with DIVArchive 6.5, 7.0, and 7.1	6
Figure 3: DIVArchive WS Session Management	17

1 Introduction

1.1 Document Conventions

The following conventions are used with respect to text:

Normal Standard Text.

Italic Used to emphasize a term or variable.

Bold Used to emphasize critical information.

6.1 Refers to a section or sub-section in the document.

Courier New Used for system screen output and system commands.

The following conventions are used with respect to file paths or variables:

DIVA_HOME: The Root Path on the file system where Oracle DIVArchive is installed.

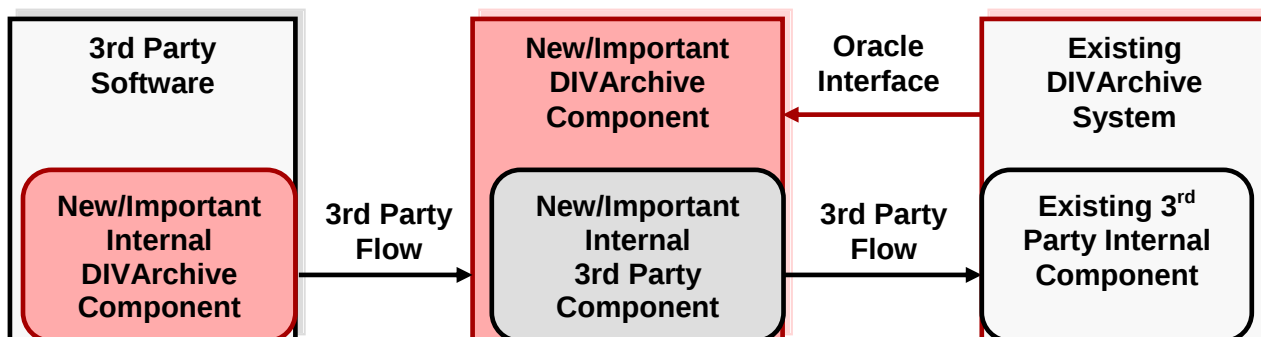
The following conventions are used with respect to figures and drawings:

Red outlined boxes pointing to specific areas in a figure indicate procedural steps, or point out specific parameters being discussed in the section text.

Red outlined boxes that surround specific areas in a figure indicate specific areas of the figure being discussed in the section text.

- For Oracle software components:
 - Oracle Red is used for borders and lines.
- For 3rd-party software:
 - Black and White are used for borders and lines.
- New/Important components:
 - Existing components have no shading.
 - New/Important components have light shading.

Figure 1: Non-Screenshot Drawing Displaying Drawing Styles



1.2 Definitions, Acronyms and Special Terms

Table 1: Definitions, Acronyms, and Special Terms

Term	Definition
API	Application Programming Interface
Array	An Array designates a collection of Disks designated by their name as they are declared in the DIVArchive configuration. A Disk Name is associated with a mounting point which should be the same for every Oracle DIVArchive Actor that can access this disk. Archive Requests can be submitted with an Array as the Destination. DIVArchive is responsible for choosing the disk location to write the data when several disks belong to the same Array.
Bundle	A Bundle is a normal jar component with extra manifest headers (<i>DIVArchive WS 1.0, DIVArchive WS 2.0, etc.</i>).
Command	Commands are API functions which typically request information (<i>such as <code>getObjectInfo</code></i>), or operations which may modify DIVArchive configuration (<i>such as <code>addGroup</code></i>). They are distinct requests that perform operations on data (<i>such as <code>Archive</code>, <code>Copy</code>, <code>Delete</code>, and <code>Restore</code></i>).
Component	A single, integral element of the software (<i>DIVArchive Application Server</i>).
Category	Part of the access key to an Object (<i>see <code>Object</code></i>). The Category is a notion for linking the Object with the user activity field. It must not be confused with the <i>Group</i> notion, which is a storage concept.
Destination	A system on which archived Objects are restored.
DIVAS	A component of DIVArchive that includes the DIVArchive Application Server and the DIVArchive WS API Bundles.
Externalization	An Object Instance is ejected when one of the tapes containing the Object's Instance components is ejected. An Object is ejected when all of its Instances are ejected. When present in the Library, the Instance is inserted if at least one instance of an Object is inserted; the Object is then considered inserted.

Term	Definition
Group	A Group is a logical notion for characterizing a Set of Objects from a user standpoint. This notion has a direct influence on the object's storage policy on tapes. Objects of the same group will be stored on the same tapes. However, Objects cannot have several Instances stored on the same tape. The Group concept is based on the DIVArchive Set. Each Group affects a Set and several Groups can affect the same Set. Only Tapes affecting the Set of a Group will be assigned to this Group. Caution: No Group can use the set 0. In a DIVArchive System several kinds of tape can be used. Groups can be defined either by using a Set in which you set only tapes of the same type, or by defining the Set using a Set in which you mix tape types. The first case allows reassurance of the tape type that is used to store the Object Instance.
HTTP	Hypertext Transfer Protocol
Media	Set of storage resources. Currently DIVArchive provides two types of media: Groups of Tapes and Arrays of Disks. Media are used as the destination for archiveObject and copyToGroup requests. The latter function should be renamed copyToMedia or simply copy, however this update was not completed due to of the need for compatibility with previous versions of DIVArchive.
Object	Objects are archive entries. An Object is identified by a pair (<i>Name, Category</i>) and contains components. A component is the DIVArchive representation of a file. The components are stored in DIVArchive as Object Instances.
Object Instance	Mapping of an Object's components onto a set of storage resources belonging to the same storage space. Deleting Instances cannot result in deleting the related Object; therefore deletion of an Instance when the Instance is unique is not permitted.
Repack	Elimination of blank blocks between two objects on a tape (<i>these blocks are caused by the deletion of objects</i>).
Request	A Request is the manner used to submit a required operation to DIVArchive. The main requests are Archive Object, Restore Object, Delete Object, and Cancel Request.
Resource	Used to denote the necessary elements involved for processing Requests (<i>e.g. Actors, Disk, Drive, and Tape</i>).
REST	Representational State Transfer. Style of software architecture for distributed hypermedia systems such as the World Wide Web.

Term	Definition
Set (of Tapes)	Every Tape in a DIVArchive System belongs to one and only Set. If the tape is not available to DIVArchive, it belongs to Set #0, otherwise it belongs to a set with a strictly positive ID (e.g.: <i>Set#1</i>). Each Group is associated with a Set. When the Group needs an additional tape, it takes it from its associated Set. Note: The DIVArchive Set concept replaces the ACSLS-Specific Pool concept.
SOA	Service Oriented Architecture: Flexible set of design principles used during the phases of systems development and integration in computing. A system based on a SOA will package functionality as a suite of interoperable services that can be used within multiple separate systems from several business domains.
SOAP	Simple Object Access Protocol: Protocol specification for exchanging structured information in the implementation of Web Services in computer networks. It relies on XML for its message format, and usually relies on other application layer protocols, most notably RPC and HTTP, for message negotiation and transmission.
SOAPUI	A tool used for testing the Web Services.
Source	A system that produces data to be archived in DIVArchive (e.g. <i>video servers, browsing servers, remote computers, etc.</i>).
Spanning	Splitting an Object's component onto several tapes (<i>usually two</i>); this may occur when the component size is larger than the remaining size left on the initial tape.
Transfer	Copy of data from a Source to an Actor's cache (<i>Archive Operation</i>) or from an Actor's cache to a Destination (<i>Restore Operation</i>).
WS	Web Services
WSDL	Web Services Description Language
XML	Extensible Markup Language: a text-based database used to allow for the easy interchange of documents and data on the World Wide Web or between software components (<i>.xml</i>).
XSD	XML Schema Definition; an XML-based language for describing grammar, or a class of documents. Schemas specify the structure of XML documents and the data type of each element or attribute of the XML document.

1.3 Overview

This reference manual contains a detailed description of the functionality of the DIVArchive Web Services (WS) Application Programmer's Interface (API) for SOAP and REST Interfaces.

Multiple DIVArchive Application Servers may be run at one time throughout the system. However they must be on separate machines as only one (1) DIVArchive Application Server can run on a single machine at any time.

Each DIVArchive Application Server is capable of running one, or several, bundles (of *different types*). The currently available bundles are:

- DIVArchive WS API 6.5
- DIVArchive WS API 7.0
- DIVArchive WS API 7.1
- DIVArchive WS API 7.2
- DIVArchive WS API 7.3

Two similar bundles cannot be run on a single DIVArchive Application Server.

When the DIVArchive Application Server with DIVArchive WS is installed and running, WSDL and Endpoints can be obtained via:

- http://localhost:9763/services/DIVArchiveWS_SOAP_1.0.DIVArchiveWSHttpSoap12Endpoint/
- http://localhost:9763/services/DIVArchiveWS_SOAP_1.0.DIVArchiveWSHttpSoap11Endpoint/
- http://localhost:9763/services/DIVArchiveWS_SOAP_1.0.DIVArchiveWSHttpEndpoint/
- http://localhost:9763/services/DIVArchiveWS_SOAP_2.0.DIVArchiveWSHttpSoap12Endpoint/
- http://localhost:9763/services/DIVArchiveWS_SOAP_2.0.DIVArchiveWSHttpSoap11Endpoint/
- http://localhost:9763/services/DIVArchiveWS_SOAP_2.0.DIVArchiveWSHttpEndpoint/
- http://localhost:9763/services/DIVArchiveWS_REST_2.0/

REST Interface can be accessible via:

`http://<host>:<port>/services/DIVArchive_WS_REST_<version>/<operation>`

(For example; http://divahost:9763/services/DIVArchive_WS_REST_1.0/copy)

For the development purposes WSDL and schema files (*described in the table below*) are delivered with the WS API package.

The figure below demonstrates how the DIVArchive WS Bundles integrates with DIVArchive version 7.0, 7.1, 7.2, and 7.3. The DIVArchive Application Server, DIVArchive WS 6.5, DIVArchive WS 7.0, DIVArchive WS 7.1, DIVArchive WS 7.2, and DIVArchive WS 7.3 are delivered as **DIVAS 2.2**.

Figure 2: DIVAS 2.2 Integration with DIVArchive 7.1, 7.2, and 7.3

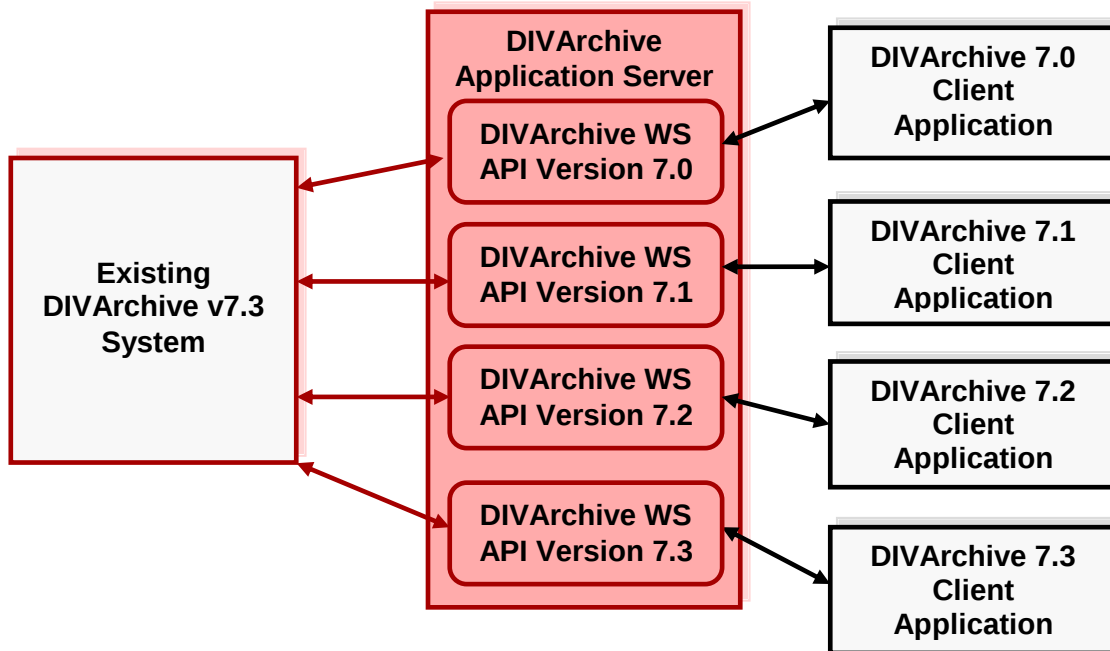


Table 2: Files Delivered with DIVArchive WS API Package

Filename	Description
DIVArchive WS_SOAP.wsdl	Web Services description file. The WSDL file contains the schema as described in files below: DIVArchive WS.xsd - DIVArchive WS_exception.xsd - DIVArchive WS_model.xsd - DIVArchive WS_response.xsd - DIVArchive WS_model.xsd
DIVArchive WS.xsd	This file contains the schema describing requests and responses structures.
DIVArchive WS_exception.xsd	This file contains the schema describing fault structures.
DIVArchive WS_model.xsd	This file contains the schema describing common complex structures.
DIVArchive WS_response.xsd	This file contains the schema describing response complex structures.

1.4 Technologies

DIVArchive WS provides two types of web services: **SOAP-based** and **REST-based**. SOAP-based Web Services are described by **WSDL** and **XSD**. **WSDL** describes the service contract (*methods that can be invoked*), while **XSD** describes the Web Services data structure.

DIVArchive WS can be deployed in the Oracle Application Server 1.1 as an OSGi bundle. In this case, the Oracle Application Server 1.1 is presented as the platform and DIVArchive WS.1.0 is presented as a module for this platform.

DIVArchive WS is compatible with the following bindings and formats:

- SOAP
 - WSDL 1.1
 - Bindings 1.0:
 1. SOAP 1.1
 2. SOAP 1.2
 3. HTTP
- REST
 - No WSDL required.
 - Bindings 1.0:
 1. HTTP (*default*)

DIVArchive WS 1.0 - list of services:

- DIVArchiveWS_SOAP_1.0
- DIVArchiveWS_REST_1.0

DIVArchive WS 2.0 - list of services:

- DIVArchiveWS_SOAP_2.0
- DIVArchiveWS_REST_2.0

DIVArchive WS 2.1 - list of services:

- DIVArchiveWS_SOAP_2.0
- DIVArchiveWS_REST_2.0

Table 3: Web Services Technologies

Technology	Information
OSGi	The OSGi framework is a module system and service platform for the Java programming language that implements a complete and dynamic component model, something that does not exist in standalone Java/VM environments.
REST	http://www.w3.org/Protocols/rfc2616/rfc2616.html The DIVArchive WS API provides a RESTful HTTP interface using the SOAP protocol specifications for exchanging structured information between Web Services.
SOAP 1.1 SOAP 1.2	SOAP 1.1: http://www.w3.org/TR/2000/NOTE-SOAP-20000508/ SOAP 1.2: http://www.w3.org/TR/2007/REC-soap12-part1-20070427/ The DIVArchive WS API provides support for SOAP 1.1 and SOAP 1.2. The SOAP-based Web Service contract is described by WSDL while the data structure is described using an XML schema (XSD).
HTTP Binding (No HTTPS)	SOAP 1.1: http://www.w3.org/TR/2000/NOTE-SOAP-20000508/#_Toc478383526 SOAP 1.2: http://www.w3.org/TR/2007/REC-soap12-part2-20070427/#soapinhttp The DIVArchive WS API supports HTTP bindings using SOAP 1.1 and SOAP 1.2, but HTTPS is not supported at this time.
WSDL 1.1	http://www.w3.org/TR/wsdl DIVArchive WS API is described by WSDL and implemented using the DIVArchive WS 1.0 OSGi bundle. The DIVArchive WS 1.0 OSGi bundle uses Apache Axis2 to interact with the client.. There are two ways to obtain the WSDL file used in the DIVArchive WS API. 1. See the <code>DIVArchive WS_SOAP.wsdl</code> files included with this documentation. 2. After installation of the DIVArchive WS, the WSDL file may be retrieved via <code>http://<host>:<port>/services/DIVArchive WS_SOA_<version>?wsdl</code> where <code>host</code> and <code>port</code> are those of the Application Server and <code>version</code> is the version of the DIVArchive WS being used.

Note: If the API Client is going to use Microsoft Tools, check the WS-I basic profile to verify it is compliant with the .NET platform being used.

The DIVArchive WS API is also WS-I compliant in several standards.

Table 4: WS-I Compliant Standards

Standard	Information
WS-I Basic Profile 1.0	http://www.ws-i.org/Profiles/BasicProfile-1.0.html
WS-I Basic Profile 1.1	http://www.ws-i.org/Profiles/BasicProfile-1.1.html
Simple Soap Binding Profile 1.0	http://www.ws-i.org/Profiles/SimpleSoapBindingProfile-1.0.html

The DIVArchive WS API can be integrated with multiple types of frameworks:

Table 5: Framework Types for Integration of DIVArchive WS

Framework	Further Information
Apache Axis and Axis2	http://ws.apache.org/axis/
Apache CXF	http://cxf.apache.org/
ASP.NET	http://www.asp.net/
Celtix	http://celtix.ow2.org/
Codehaus XFire	http://xfire.codehaus.org/
Cordys	http://www.cordys.com/
GlassFish Metro	http://metro.java.net/
Gosu	http://gosu-lang.org/
IBM WebSphere Application Server	http://www.ibm.com/software/webservers/appserv/was/#
JBossWS	http://www.jboss.org/jbossws
Oracle Weblogic Server	http://www.oracle.com/us/products/middleware/application-server/index.html
Software AG webMethods	http://www.softwareag.com/corporate/default.asp
SpringWS	http://static.springsource.org/spring-ws/sites/1.5/

1.5 Development Prerequisites

Developers should be proficient in the language chosen to interface with the DIVArchive WS API along with XML and the proper handling of XML documents.

If interacting with the DIVArchive WS API using SOAP 1.1 proficiency in the chosen protocols must be complemented by knowledge of service oriented architectures (SOA) and the WSDL. It is recommended, but optional, to also have a working knowledge of a chosen SOAP toolkit for generating code from provided WSDL files. The DIVArchive API is written in the WSDL 1.1 XML format.

If interacting with the DIVArchive WS API using the RESTful interface then knowledge of the REST architecture is necessary as well as how to send requests through the HTTP POST method.

2 DIVArchive API Usage and Operations

2.1 XML Encoding

The DIVArchive WS API accepts XML that uses UTF-8 character encoding. To use UTF-8 as the encoding for SOAP request messages simply use the same syntax as used in XML. This applies to interfacing with the DIVArchive WS API using both RESTful and SOAP interfaces.

```
<?xml version="1.0" encoding="UTF-8" ?>
```

Once this is done, request messages may be sent using and characters valid within the UTF-8 standard. Response messages will come encoded in UTF-8 as well, so be sure to handle the data within response messages properly as well. More information about using Unicode in XML can be found at <http://www.w3.org/TR/unicode-xml/>.

Characters with special meanings in XML, such as < and >, may be used within strings by replacing the character with `&#x` followed by the hexadecimal value for that character. For example < would be written as `<` and > would be `>`.

2.2 XML Namespaces and Prefixes

In order to keep things as simple and compact as possible, simple names are generally used for XML elements. This creates the problem of naming conflicts as one word may be used differently in many contexts. For example, an element named **card** can mean a playing card or business card.

```
<card>
  <suit>Spades</suit>
  <value>Ace</value>
</card>

<card>
  <name>John Smith</name>
  <company>Dummy Inc.</company>
  <email>jsmith@dummy.com</email>
</card>
```

To solve this, XML uses namespaces and prefixes. When using a prefix with in an element's name, the prefix is used to differentiate between multiple uses of elements with the same basic name. This means that the **card** element can now be identified as **game:card** for the playing card and **job:card** for the business card.

```
<game:card>
  <game:suit>Spades</game:suit>
  <game:value>Ace</game:value>
</game:card>

<job:card>
  <job:name>John Smith</job:name>
  <job:company>Dummy Inc.</job:company>
  <job:email>jsmith@dummy.com</job:email>
</job:card>
```

To use prefixes, they must first be defined. To do this, XML uses namespaces. Namespaces are unique identifiers defined within an element's tag. Any children of an element defining a namespace and prefix can use that namespace and prefix as well.

```
<game:card xmlns:game="http://www.dummy.com/playingcards/">
  <game:suit>Spades</game:suit>
  <game:value>Ace</game:value>
</game:card>
```

```
<job:card xmlns:job="http://www.dummy.com/corporate/">
  <job:name>John Smith</job:name>
  <job:company>Dummy Inc.</job:company>
  <job:email>jsmith@dummy.com</job:email>
</job:card>
```

Using the two namespaces and prefixes, it is now easy to see from a high level which type of card each instance of the card element is without inspecting its elements.

2.3 Request Building and Data Structures Management

All data Structures are described in the WSDL and `xsd` files and can be used to generate client code automatically. The `xs:sequence` section of the structure refers to parameters that should be strict in the order of appearance within the definition.

The default value for `minOccurs` and `maxOccurs` attributes of the `xs:element` are 1. This means that each element should appear exactly once if there are no `minOccurs` and `maxOccurs` attributes in the element description.

Note: If `maxOccurs` is greater than 1, this indicates that the described variable is an array. It can have an *unbounded* value, which means that the size of the array is indefinite (see the example below).

The default values for the `nillable` attributes of the `xs:element` is false. This indicates that a value of `xsi:nil` is not acceptable.

XSD Definition Example:

```
<xs:element name="addGroup">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="sessionCode" type="xs:string"/>
      <xs:element name="groupName" type="xs:string"/>
      <xs:element name="associatedSet" type="xs:int"/>
      <xs:element nillable="true" name="comment" type="xs:string"/>
      <xs:element name="toBeRepacked" type="xs:boolean"/>
      <xs:element name="worstFitEnabled" type="xs:boolean"/>
      <xs:element name="worstFitRepackTapes" type="xs:int"/>
      <xs:element name="fileFolder" nillable="true" type="xs:string"/>
      <xs:element name="option" nillable="true" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

Correct Request:

```
<p:addGroup
xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <p:sessionCode>sessionCode</p:sessionCode>
  <p:groupName>groupName</p:groupName>
  <p:associatedSet>associatedSet</p:associatedSet>
  <p:comment>comment</p:comment>
  <p:toBeRepacked>toBeRepacked</p:toBeRepacked>
  <p:worstFitEnabled>worstFitEnabled</p:worstFitEnabled>
  <p:worstFitRepackTapes>worstFitRepackTapes</p:worstFitRepackTapes>
</p:addGroup>
```

Incorrect Requests

Example 1 - Missing groupName:

```
<p:addGroup
  xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <p:sessionCode>sessionCode</p:sessionCode>

  <p:associatedSet>associatedSet</p:associatedSet>
  <p:comment>comment</p:comment>
  <p:toBeRepacked>toBeRepacked</p:toBeRepacked>
  <p:worstFitEnabled>worstFitEnabled</p:worstFitEnabled>
  <p:worstFitRepackTapes>worstFitRepackTapes</p:worstFitRepackTapes>
</p:addGroup>
```

Example 2 - Incorrect order:

```
<p:addGroup
  xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <p:groupName>groupName</p:groupName>
  <p:sessionCode>sessionCode</p:sessionCode>
  <p:associatedSet>associatedSet</p:associatedSet>
  <p:comment>comment</p:comment>
  <p:toBeRepacked>toBeRepacked</p:toBeRepacked>
  <p:worstFitEnabled>worstFitEnabled</p:worstFitEnabled>
  <p:worstFitRepackTapes>worstFitRepackTapes</p:worstFitRepackTapes>
</p:addGroup>
```

Example 3 - XSD array definition:

```
<xs:complexType name="DivaObjectTapeInfo">
  <xs:sequence>
    <xs:element minOccurs="1" maxOccurs="1" name="objectSummary"
      type="dwsm:DivaObjectSummary"/>
    <xs:element minOccurs="1" maxOccurs="unbounded"
      name="tapeInstanceInfo" type="dwsm:DivaInstanceTapeInfo"/>
  </xs:sequence>
</xs:complexType>
```

Note: `tapeInstanceInfo` is an array.

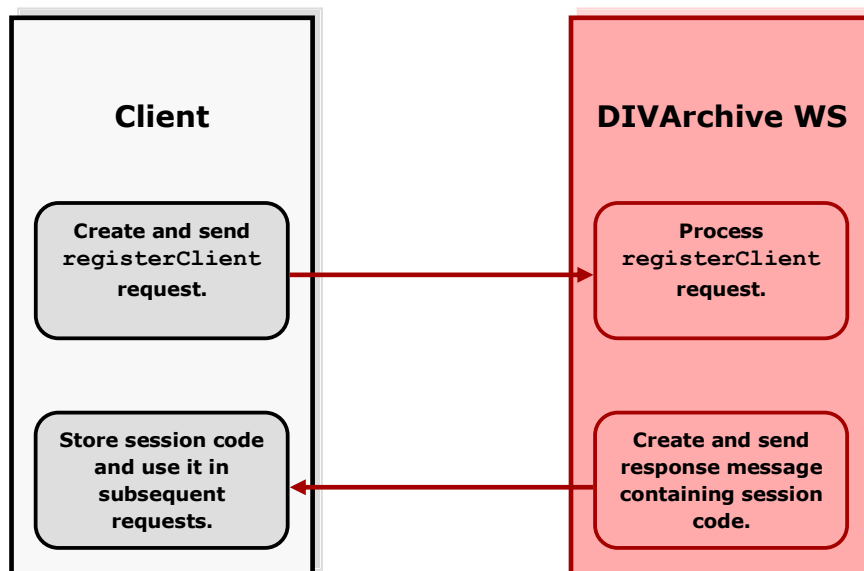
Data example:

```
<objectTapeInfo>
  <objectSummary>
    <objectCategory>objectCategory</objectCategory>
    <objectName>objectName</objectName>
  </objectSummary>
  <!--1st element of array -->
  <tapeInstanceInfo>
    <req>req</req>
    <reqDate>reqDate</reqDate>
    <instanceID>instanceID</instanceID>
    <tapeDesc>
      <externalizationComment/>
      <goingToBeRepacked>goingToBeRepacked</goingToBeRepacked>
      <inserted>inserted</inserted>
      <vsns>vsns</vsns>
    </tapeDesc>
  </tapeInstanceInfo>
  <!--2nd element of array -->
  <tapeInstanceInfo>
    <req>req</req>
    <reqDate>reqDate</reqDate>
    <instanceID>instanceID</instanceID>
    <tapeDesc>
      <externalizationComment/>
      <goingToBeRepacked>goingToBeRepacked</goingToBeRepacked>
      <inserted>inserted</inserted>
      <vsns>vsns</vsns>
    </tapeDesc>
  </tapeInstanceInfo>
</objectTapeInfo>
```

2.4 Session Management

The DIVArchive WS provides mechanisms necessary for managing multiple sessions. To use the DIVArchive WS from a client, that client must be registered with a unique session code to differentiate its session from those of other clients. To obtain this session code the client must first connect to the DIVArchive WS and send a `registerClient` request as defined in [Section 2.8.1](#). The response from `registerClient` contains a session code unique to all clients which lasts as long as the client is reasonably active as defined by the timeout chosen (*default 30 minutes*). If the amount of time since the last message from the client passes the chosen timeout then that session is considered expired and cannot be used again. If this occurs, simply send another `registerClient` request to continue working with the DIVArchive WS.

Figure 3: DIVArchive WS Session Management



2.5 DIVArchive Version Compatibility

A DIVArchive WS client is compatible with the same version of the DIVArchive WS API and the DIVArchive WS API is compatible with all current and future versions of DIVArchive. A DIVArchive WS client with version 1.0.x.x.x would be compatible with DIVArchive WS API version 1.0.x.x.x which would be compatible with any DIVArchive version 6.5, 7.0 and later. A DIVArchive WS client with version 2.0.x.x.x would be compatible with DIVArchive WS API version 2.0.x.x.x which would be compatible with any DIVArchive version 7.0 and later.

Any new features added to DIVArchive after the version of the WS API in use will not be available; the client system must be upgraded to the latest version to utilize all features. Multiple DIVArchive WS installations may be installed at once and so each client system should connect to the server with which it is compatible.

Table 6: DIVArchive WS Compatibility

Delivery Package Version	DIVArchive WS Version	Compatible DIVArchive Version	Backward and Forward Compatibility
2.0.x	1.0.x	6.5.x	Backward compatibility is not supported. Forward compatibility: compatible with DIVArchive version 6.5 and later.
2.1.x	2.0.x	7.0.x	Backward compatibility is not supported. Forward compatibility: DIVArchive 7.0.x has been deprecated; therefore forward compatibility is not supported.
2.2	2.1	7.1.x and later	Backward compatibility is not supported. Forward compatibility: compatible with DIVArchive version 7.1.x and later.

2.6 *Alternate APIs*

The DIVArchive WS API is described by WSDL and applications implemented using the WSDL XML format. Additional APIs are available:

- DIVArchive Java API – Set of tools, libraries and jar files used for implementing client applications using the Java programming language. See the Oracle DIVArchive Java API documentation.
- DIVArchive C++ API – Set of tools and libraries used for implementing client applications using the C++ programming language. See the Oracle DIVArchive C++ API documentation.

2.7 RESTful Interfacing with the DIVArchive WS

The DIVArchive WS API provides for RESTful interfacing with the DIVArchive WS. In order to implement this method of communication, standard HTML form data or Plain Old XML (POX) messages are sent to the DIVArchive WS by way of HTTP's POST method. To access an operation for a given DIVArchive WS **host**, **port** and **version**, the URL would take the form of:

```
http://<host>:<port>/services/DIVArchive_WS_REST_<version>/<operation>
```

An example of using an HTML form to send data to an operation, in this case **registerClient**, depicts a standard HTML form with the correct parameters and URL filled in:

```
<html>
  <body>
    <form action="http://127.0.0.1:9763/services/DIVArchive
      WS_REST_1.0/registerClient" method="POST">
      <input name="appName" type="text"/>
      <input name="locName" type="text"/>
      <input name="processId" type="text"/>
      <input name="go" type="submit"/>
    </form>
  </body>
</html>
```

To send a DIVArchive request with POX and a direct HTTP request rather than a form, the following messages would be sent using HTTP POST with different mime-Types:

1. Content-Type:application/xml

```
<xsd:registerClient
xmlns:xsd="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <xsd:appName>Hello World Application</xsd:appName>
  <xsd:locName>2</xsd:locName>
  <xsd:processId>1</xsd:processId>
</xsd:registerClient>
```

2. Content-Type:text/xml

```
<env:Envelope
xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <xsd:registerClient
xmlns:xsd="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xsd:appName>Hello World Application</xsd:appName>
      <xsd:locName>2</xsd:locName>
      <xsd:processId>1</xsd:processId>
```

```

</xsd:registerClient>
</env:Body>
</env:Envelope>

```

DIVArchive WS is available to return several mime-Types of response:

- application/xml
- text/xml

Client can request necessary mime-Type using HTTP header Accept:

- Accept:text/xml

In either case, the response from the DIVArchive WS would be a POX message that looks like:

1) application/xml

```

Content-Type    application/xml;charset=UTF-8
Transfer-Encoding    chunked
Content-Encoding    gzip
Vary    Accept-Encoding
Date    Thu, 21 Jul 2011 13:17:04 GMT
Connection    close
Server    WSO2 Carbon Server

```

```

<ns4:registerClientResponse
  xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <ns4:return>5b5a6592-2b56-498d-b204-9abe695ebbfa</ns4:return>
</ns4:registerClientResponse>

```

2) text/xml

```

Content-Type    text/xml;charset=UTF-8
Transfer-Encoding    chunked
Content-Encoding    gzip
Vary    Accept-Encoding
Date    Thu, 21 Jul 2011 13:17:04 GMT
Connection    close
Server    WSO2 Carbon Server

```

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Body>
<ns4:registerClientResponse
xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <ns4:return>5b5a6592-2b56-498d-b204-9abe695ebbfa</ns4:return>
</ns4:registerClientResponse>
</soapenv:Body>
</soapenv:Envelope>
```

2.8 Session Management Commands

The following namespaces are used by the commands in this section:

```
xmlns:wSDL="http://schemas.xmlsoap.org/wsdl/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:dwsI="http://interaction.api.ws.diva.fpdigital.com/xsd"
xmlns:dwsM="http://model.api.ws.diva.fpdigital.com/xsd"
xmlns:dwsR="http://response.model.api.ws.diva.fpdigital.com/xsd"
xmlns:dwsE="http://exception.api.ws.diva.fpdigital.com/xsd"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"
xmlns:http="http://schemas.xmlsoap.org/wsdl/http/"
xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:mime="http://schemas.xmlsoap.org/wsdl/mime/"
xmlns:soap12="http://schemas.xmlsoap.org/wsdl/soap12/"
xmlns:tns="http://www.fpdigital.com/diva.ws"
targetNamespace="http://www.fpdigital.com/diva.ws"
xsi:schemaLocation="http://schemas.xmlsoap.org/wsdl/"
classpath:wSDL.xsd"
```

2.8.1 registerClient

Synopsis

Registers a client session on the DIVArchive System with the client that sent this request.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

`registerClient` is the first thing that must be done before further interfacing with the DIVArchive WS API. It returns the `sessionCode` necessary to perform future requests and to differentiate between each client. See [2.3 Session Management](#) for more information.

`dwsi:registerClient`

Parameter	Description
<code>appName</code>	String: Name of application to be registered.
<code>locName</code>	String: <code>locName</code> is the physical location where the computer running the client is located and is used for human consumption.
<code>processId</code>	String: Process ID number to be used for registering the client application.

Return Value

`dwsi:registerClientResponse`

Section	Description
<code>return</code>	String: Unique session code associated with the client's session for use in future requests.

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <xsd:registerClient
      xmlns:xsd="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xsd:appName>appName</xsd:appName>
      <xsd:locName>locName</xsd:locName>
      <xsd:processId>processId</xsd:processId>
    </xsd:registerClient>
  </env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Body>
<ns4:registerClientResponse
  xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <ns4:return>5b5a6592-2b56-498d-b204-9abe695ebbfa</ns4:return>
</ns4:registerClientResponse>
</soapenv:Body>
</soapenv:Envelope>
```

2.9 SOAP Faults

If a DIVArchive system error occurs, a DIVArchive error code will be generated for the error. However, a SOAP Fault will be returned for any communication errors that may occur. The SOAP faults differ from DIVArchive WS API error codes in that they correspond to SOAP-specific errors found in the request message or general faults not directly related to the processing of a valid request message.

Value	Description
faultcode	A standardized code for SOAP fault classification.
faultstring	A human-readable description of the fault.

faultcode is based on one of the following values and are extendible using the “.” character to create more specific codes.

Value	SOAP Version Compatibility	Description
VersionMismatch	1.1	The namespace used in the SOAP Envelope does not match what is expected. The DIVArchive WS API supports SOAP 1.1 using the namespace “http://schemas.xmlsoap.org/soap/envelope/” .
MustUnderstand	1.1	The server did not understand an element of the request header that had the mustUnderstand attribute set to true .
Client	1.1	The request either contained incorrect information or was malformed. The message must be fixed before resending.
Server	1.1	There was a server-side error that prevented the successful parsing or execution of the request.

`faultstring` values belong to a few fault groups and have a better fault description than a `faultcode`.

Fault Group	Error Message String	Description
Common Faults	internal error	An internal error has been detected by the DIVArchive WS.
Session Faults	Session does not exist: <code>sessionID = <UUID></code>	The previous request uses a Session Code that the DIVArchive WS doesn't have registered with an active session.
Session Faults	wrong session parameter	<code>registerClient</code> operation called with an invalid parameter.
Session Faults	session is expired	The previous request uses a Session Code that was previously registered using <code>registerClient</code> but whose session has been inactive for longer than the configured amount of time. A new Session Code must be registered to continue using the DIVArchive WS API.
AXIS Workaround Faults	Invalid SOAP Message. Some parameter is missing or null.	The previous request is missing at least one mandatory parameter or at least one parameter is set to <code>null</code> .
AXIS Workaround Faults	Invalid SOAP Message. Some array parameter has no elements.	The previously submitted request has at least one array parameter with no elements in it.

SOAP 1.1 Fault

```
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <soapenv:Fault>
      <faultcode>faultcode</faultcode>
      <faultstring>faultstring</faultstring>
      <detail/>
    </soapenv:Fault>
  </soapenv:Body>
</soapenv:Envelope>
```

2.10 Quality of Service (QOS)

Basic Quality of Service (QOS - *qualityOfService*) values for both Archive and Restore requests use integer values and include the following:

Table 7: Quality of Service Levels, Values, and Descriptions

QOS Level (Parameter)	Value	Description
DIVA_QOS_DEFAULT	0	Restoring is performed according to the default Quality Of Service (<i>currently: direct and cache for restore operations</i>).
DIVA_QOS_CACHE_ONLY	1	Use Cache Restore only.
DIVA_QOS_DIRECT_ONLY	2	Use Direct Restore only.
DIVA_QOS_DIRECT_AND_CACHE	3	Use Direct Restore if available or Cache Restore if Direct Restore is not available.
DIVA_QOS_CACHE_AND_DIRECT	4	Use Cache Restore if available or Direct Restore if Cache Restore is not available.
DIVA_QOS_NEARLINE_ONLY	5	Use Nearline only.
DIVA_QOS_NEARLINE_AND_DIRECT	6	Use Nearline if available or Direct if Nearline is not available.

Additional and optional services are also available. To request those services use a logical OR between the previously documented Quality of Service parameter and the following constants:

Table 8: Additional/Optional QOS Values

Constant	Value	Description
DIVA_RESTORE_SERVICE_DO_NOT_OVERWRITE	0x0100	Do not overwrite existing files on the destination server.
DIVA_RESTORE_SERVICE_DO_NOT_CHECK_EXISTENCE	0x0200	Do not check existence of the clip on the server.
DIVA_RESTORE_SERVICE_DELETE_AND_WRITE	0x0400	Force Delete and Rewrite if Object exists on the server.
DIVA_RESTORE_SERVICE_DEFAULT	0x0800	Operate using the default setting in the DIVArchive WS configuration.

2.11 Requests and Commands

The subsections below describe the requests and commands used with the DIVArchive WS API. The following namespaces are used by the commands in this section:

```
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:dwsr="http://interaction.api.ws.diva.fpdigital.com/xsd"
xmlns:dwsr="http://response.model.api.ws.diva.fpdigital.com/xsd"
xmlns:dwsr="http://exception.api.ws.diva.fpdigital.com/xsd"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"
xmlns:http="http://schemas.xmlsoap.org/wsdl/http/"
xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:mime="http://schemas.xmlsoap.org/wsdl/mime/"
xmlns:soap12="http://schemas.xmlsoap.org/wsdl/soap12/"
xmlns:tns="http://www.fpdigital.com/diva.ws"
targetNamespace="http://www.fpdigital.com/diva.ws"
xsi:schemaLocation="http://schemas.xmlsoap.org/wsdl/"
classpath:wsdl.xsd"
```

The DIVArchive WS API represents an Array with no elements using the statement **highlighted** below.

Note: This example is only a partial response to show the Array with no elements statement.

```
<ns2:numOfAvailableDrives
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">6</ns2:numOfA
vailableDrives>
<ns2:numberOfBlankTapes
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">644</ns2: numb
erOfBlankTapes>
<ns2:pendingRequests xsi:nil="1"
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd"/>
<ns2:remainSizeOnTapes
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">67</ns2:remai
nSizeOnTapes>
<ns2:siteIpAddress
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">172.16.4.219<
/ns2:siteIpAddress>
```

The following Generic Status Codes are valid for all commands in the following subsections:

Table 9: Generic Status Codes for all Commands

Status Code	Name	Description
1000	DIVA_OK	The function completes normally.
1001	DIVA_ERR_UNKNOWN	An unknown status has been received from the DIVArchive WS.
1002	DIVA_ERR_INTERNAL	An internal error has been detected by the DIVArchive System.
1004	DIVA_ERR_BROKEN_CONNECTION	The connection between the DIVArchive System and DIVArchive WS has been broken.
1008	DIVA_ERR_INVALID_PARAMETER	A parameter value has not been understood by the DIVArchive System.
1013	DIVA_ERR_SYSTEM_IDLE	The DIVArchive System is no longer able to accept connections and queries.
1020	DIVA_ERR_NOT_CONNECTED	No open connection.
1024	DIVA_ERR_TIMEOUT	Time out limit has been reached before communication between the DIVArchive System and DIVArchive WS could be performed. Time out duration is set by the DIVARCHIVE_RESPONSE_TIMEOUT_IN_MINUTES variable and equals 10 minutes by default.
1032	DIVA_ERR_CANNOT_ACCEPT_MORE_REQUESTS	Count of simultaneous requests reached the maximum allowed value. This variable is set in the conf.properties configuration file. The default value is 300.

2.11.1 addGroup

Synopsis

Adds a new Group.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

dws:addGroup

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
groupName	String: Name of the Group to be added.
associatedSet	Int: DIVArchive Set of Tapes to associate with the new Group. This value must be strictly greater than 0.
comment	String: Text describing the new Group.
mediaFormatId	Int: Data format to be used by the tapes assigned to this group. • DIVA_MEDIA_FORMAT_LEGACY = 0 • DIVA_MEDIA_FORMAT_AXF = 1
toBeRepacked	Boolean: If true, Tapes belonging to this Group are eligible for Automatic Repacking. Acceptable values are true/false or 1/0.
worstFitEnabled	Boolean: If true, Worst Fit policy (<i>access speed optimization</i>) will apply. Acceptable values are true/false or 1/0.
worstFitRepackTapes	Int: Number of Tapes reserved for Worst Fit Repacking.

Return Value

`dwsr:DivaStatusResponse`

Parameter	Description
<code>divaStatus</code>	Int: One of these <code>DIVA_STATUS</code> constants. Refer to Appendix A3 DIVArchive WS Status Codes.

Possible `divaStatus` codes include:

Request-Specific Status Codes

Status Code	Name	Description
1021	<code>DIVA_ERR_GROUP_ALREADY_EXISTS</code>	The specified Group already exists.

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:addGroup
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd"
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionCode</xs:sessionCode>
      <xs:groupName
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">groupName</xs:groupName>
      <xs:associatedSet
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">associatedSet</xs:associatedSet>
      <xs:comment
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">comment</xs:comment>
      <xs:toBeRepacked
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">toBeRepacked</xs:toBeRepacked>
      <xs:worstFitEnabled
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">worstFitEnabled</xs:worstFitEnabled>
```

```

    <xs:worstFitRepackTapes
      xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">worstFit
    RepackTapes</xs:worstFitRepackTapes>
  </p:addGroup>
</env:Body>
</env:Envelope>

```

REST Response Structure

```

<ns4:addGroupResponse
  xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <ns4:return>
    <ns1:divaStatus
      xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd">di
    vaStatus</ns1:divaStatus>
  </ns4:return>
</ns4:addGroupResponse>

```

2.11.2 addGroupShort

Synopsis

Adds a new Group.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

dwsr:addGroupShort

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
groupName	String: Name of the Group to be added.
associatedSet	Int: DIVArchive Set of Tapes to associate with the new Group. This value must be strictly greater than 0.
comment	String: Text describing the new Group.
toBeRepacked	Boolean: If true, Tapes belonging to this Group are eligible for Automatic Repacking. Acceptable values are true/false or 1/0.

dwsr:DivaStatusResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.

Possible `divaStatus` codes include:

Request-Specific Status Codes

Status Code	Name	Description
1021	DIVA_ERR_GROUP_ALREADY_EXISTS	The specified Group already exists.

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:addGroupShort
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
        ode</xs:sessionCode>
      <xs:groupName
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">groupNam
        e</xs:groupName>
      <xs:associatedSet
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">associat
        edSet</xs:associatedSet>
      <xs:comment
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">comment<
        /xs:comment>
      <xs:toBeRepacked
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">toBeRepa
        cked</xs:toBeRepacked>
    </p:addGroupShort>
  </env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Body>
<ns4:addGroupShortResponse
xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <ns4:return>
    <ns1:divaStatus
xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd">di
    vaStatus</ns1:divaStatus>
  </ns4:return>
</ns4:addGroupShortResponse>
</soapenv:Body>
</soapenv:Envelope>
```

2.11.3 archiveObject

Synopsis

Submits an Object Archive Request to the DIVArchive System.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

This function returns as soon as the DIVArchive System accepts the Request. To check that the operation completes successfully, the application must send the request `getRequestInfo`.

dws:archiveObject

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
objectName	String: Name of the Object to be archived.
objectCategory	String: Category of the Object.
source	String: Name of the Source (<i>e.g. video server, browsing server</i>). This name must be known by the DIVArchive configuration description.
mediaName	String: mediaName designates either a Group of Tapes or an Array of Disks declared in the configuration where the Instance has to be created. When using Oracle DIVAnet, the mediaName parameter should be provided in the DIVAnet format: <code><destination DIVArchive System Name>_<destination DIVArchive System Media Name>.</code> When this parameter is a null string, the default Group of Tapes called "DEFAULT" is used.
filePathRoot	String: Root folder for the files specified by the filenamesList parameter.

Parameter	Description
filenamesList	List of String: File path names relative to the directory specified by the <code>filesPathRoot</code> parameter. When <code>filesPathRoot</code> is null, path names must be absolute names. To specify more than one filename multiple <code>filenamesList</code> parameters must be used as shown below: <pre> <!--1 or more repetitions:--> <xsd1:fileNamesList>test1.txt</xsd1:fileNamesList> <xsd1:fileNamesList>test2.txt</xsd1:fileNamesList> </pre> For DIVArchive version 7.1.2 and later ONLY: If the <code>-gcinfilelist</code> option is specified, the Genuine Checksum is included with a colon separator between the file name and the GC value. <pre> <xsd1:fileNamesList> test1.txt:a6f62b73f5a9bf380d32f062f2d71cbc </xsd1:fileNamesList> <xsd1:fileNamesList> test2.txt:96bf41e4600666ff69fc908575c0319c </xsd1:fileNamesList> </pre>
qualityOfService	Int: Refer to Section 2.10 for details.
priorityLevel	Int: Level of priority for this Request. The <code>priorityLevel</code> can be in the range [0...100] or the value <code>DIVA_DEFAULT_REQUEST_PRIORITY = - 1</code>. The value 0 is the lowest priority and 100 the highest. There are five predefined values: <pre> DIVA_REQUEST_PRIORITY_MIN = 0 DIVA_REQUEST_PRIORITY_LOW = 25 DIVA_REQUEST_PRIORITY_NORMAL = 50 DIVA_REQUEST_PRIORITY_HIGH = 75 DIVA_REQUEST_PRIORITY_MAX = 100 </pre> Using the <code>DIVA_DEFAULT_REQUEST_PRIORITY = -1</code> value, the DIVArchive WS uses the default priority for this request (<i>default request priority is defined in the DIVArchive WS configuration</i>). Using another value (<i>out of the range [0...100] or predefined values</i>) yields a <code>DIVA_ERR_INVALID_PARAMETER</code> error.
comments	String: Optional information describing the Object (<i>can be a null string</i>).

Parameter	Description
archiveOptions	String: Additional options that must be used for performing the transfer of data from the Source to DIVArchive. These options supersede any options specified in the DIVArchive Configuration Database. Currently the possible values for archiveOptions are: • A null string to specify no options. • -r: Specifies that every name in filenamesList that refers to a directory must be scanned recursively. This also applies when a Files Path Root is specified and '*' is used to designate the file(s) to be archived. This option may be used when archiving from a local source or from a standard FTP server. • -login: Login is used for some sources. • -pass: Password used in conjunction with the -login option for some sources. For DIVArchive version 7.1.2 and later ONLY: -gcinfilelist [gcType]: Specifies that Genuine Checksum (GC) values are included in the file names list. The value of gcType must match the Oracle DIVArchive Manager Default Checksum Type as specified in the DIVArchive Configuration (<i>this is MD5 by default</i>). The GC values are then used to verify the transfer from the Source.

Return Value

dwsr:DivableObjectStatusResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.
requestNumber	Int: Number identifying the Request.

Possible **divaStatus** codes include:

Request-Specific Status Codes

Status Code	Name	Description
1016	DIVA_ERR_OBJECT_ALREADY_EXISTS	An object with the Name and Category already exists in the DIVArchive System.
1017	DIVA_ERR_GROUP_DOESNT_EXIST	The Group or the Array of Disks does not exist.
1018	DIVA_ERR_SOURCE_OR_DESTINATION_DOESN'T_EXIST	The specified Source/Destination is not known by the DIVArchive System.

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

REST Request Structure

```

<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:archiveObject
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionCode</xs:sessionCode>
      <xs:objectName
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectName</xs:objectName>
      <xs:objectCategory
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectCategory</xs:objectCategory>
      <xs:source
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">source</xs:source>
      <xs:mediaName
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">mediaName</xs:mediaName>
      <xs:filePathRoot
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">filePathRoot</xs:filePathRoot>
      <xs:fileNamesList
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">fileNamesList</xs:fileNamesList>
    </p:archiveObject>
  </env:Body>
</env:Envelope>

```

```

<xs:qualityOfService
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">qualityO
fService</xs:qualityOfService>

<xs:priorityLevel
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">priority
Level</xs:priorityLevel>

<xs:comments
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">comments
</xs:comments>

<xs:archiveOptions
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">archiveO
ptions</xs:archiveOptions>
</p:archiveObject>
</env:Body>
</env:Envelope>

```

REST Response Structure

```

<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Body>
<ns4:archiveObjectResponse
xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <ns4:return
xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="ns1:DivaObjectStatusResponse">
    <ns1:divaStatus>divaStatus</ns1:divaStatus>
    <ns1:requestNumber>requestNumber</ns1:requestNumber>
  </ns4:return>
</ns4:archiveObjectResponse>
</soapenv:Body>
</soapenv:Envelope>

```

2.11.4 associativeCopy

Synopsis

Submits a Request for creating new Instances in the Group specified by **group**.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP**: Refer to the WSDL and schema files provided.
- **REST**: See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

DIVArchive guarantees that these Instances are stored sequentially on Tapes.

- The Request is completed only when every Object has been copied on to the same tape.
- In case of drive or tape failure during write operation, Instances currently written are erased and the Request is retried once.
- Choice of the tape to be used for the copy follows the policy used for the Archive operation (*written tapes with enough remaining size regardless of optimizations*).
- Associative Copy does not span. Request aborts (*and is retried once*) instead of spanning. If the sum of the size of the Objects to copy exceeds the capacity of every individual tape present in the Library, the Request aborts.

dws:associativeCopy

Parameter	Description
sessionCode	String : Unique ID associated with the client's session.
objectsInfo	List of DivaObjectSummary : collection of source objects information container. See DivaObjectSummary structure.
groupName	String : Name of the Group where the new Instance will be located. Note: Associative Copy to Disk Array is not available.

Parameter	Description
priorityLevel	Int: Level of priority for this Request. The priorityLevel can be in the range [0...100] or the value DIVA_DEFAULT_REQUEST_PRIORITY = -1. The value 0 is the lowest priority and 100 the highest. There are five predefined values: • DIVA_REQUEST_PRIORITY_MIN = 0 • DIVA_REQUEST_PRIORITY_LOW = 25 • DIVA_REQUEST_PRIORITY_NORMAL = 50 • DIVA_REQUEST_PRIORITY_HIGH = 75 • DIVA_REQUEST_PRIORITY_MAX = 100 Using the DIVA_DEFAULT_REQUEST_PRIORITY = -1 value, the DIVArchive WS uses the default priority for this request (<i>default request priority is defined in the DIVArchive WS configuration</i>). Using another value (<i>out of the range [0...100] or predefined values</i>) yields a DIVA_ERR_INVALID_PARAMETER error.

dwsr:DivaObjectSummary

Parameter	Description
objectCategory	String: Category that the source Object is in.
objectName	String: Name of the source Object.

dwsr:DivaObjectStatusResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.
requestNumber	Int: Number identifying the Request.

Possible `divaStatus` codes include:

Request-Specific Status Codes

Status Code	Name	Description
1009	<code>DIVA_ERR_OBJECT_DOESNT_EXIST</code>	The specified Object does not exist in the DIVArchive Database.
1010	<code>DIVA_ERR_SEVERAL_OBJECTS</code>	More than one Object with the specified name exists in the DIVArchive Database.
1017	<code>DIVA_ERR_GROUP_DOESNT_EXIST</code>	The Group does not exist.
1023	<code>DIVA_ERR_OBJECT_OFFLINE</code>	No available Instance for this Object. Tape Instances are ejected and no Actor could provide a Disk Instance.
1031	<code>DIVA_ERR_OBJECT_IN_USE</code>	The Object is currently in use (<i>being Archived, Restored, Deleted, etc.</i>).
1036	<code>DIVA_ERR_OBJECT_PARTIALLY_DELETED</code>	The specified Object has Instances that are partially deleted.

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

See also: `archiveObject` and `copy` or `copyToGroup`

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:associativeCopy
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionCode</xs:sessionCode>
      <dws:objectsInfo
        xmlns:dws="http://interaction.api.ws.diva.fpdigital.com/xsd">
        <xs:objectCategory
          xmlns:xs="http://model.api.ws.diva.fpdigital.com/xsd">objectCategory
        </xs:objectCategory>
      </dws:objectsInfo>
    </p:associativeCopy>
  </env:Body>
</env:Envelope>
```

```

    <xs:objectName
xmlns:xs="http://model.api.ws.diva.fpdigital.com/xsd">objectName</xs
:objectName>
</dws:objectsInfo>

<xs:groupName
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">groupNam
e</xs:groupName>

<xs:priorityLevel
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">priority
Level</xs:priorityLevel>
</p:associativeCopy>
</env:Body>
</env:Envelope>

```

REST Response Structure

```

<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Body>
<ns4:associativeCopyResponse
xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
    <ns4:return
xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="ns1:DivaObjectStatusResponse">
        <ns1:divaStatus>divaStatus</ns1:divaStatus>
        <ns1:requestNumber>requestNumber</ns1:requestNumber>
    </ns4:return>
</ns4:associativeCopyResponse>
</soapenv:Body>
</soapenv:Envelope>

```

2.11.5 cancelRequest

Synopsis

Submits a Cancel Request to the DIVArchive System.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

This function returns as soon as the DIVArchive WS accepts the Request. To check that the operation was successful, the application must send the request `getRequestInfo`.

dws:cancelRequest

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
requestNumber	Int: Number identifying the Request to be cancelled. This parameter can be set to 0 (zero) to cancel all cancellable requests.

Return Value

dwsr:DivaStatusResponse

Parameter	Description
divaStatus	Int: One of these <code>DIVA_STATUS</code> constants. Refer to Appendix A3 DIVArchive WS Status Codes.

Possible `divaStatus` codes include:

Request-Specific Status Codes

Status Code	Name	Description
1011	DIVA_ERR_NO_SUCH_REQUEST	<code>requestNumber</code> identifies no Request.

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

See also: `getRequestInfo`

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:cancelRequest
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd"
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
        ode</xs:sessionCode>
      <xs:requestNumber
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">requestN
        umber</xs:requestNumber>
    </p:cancelRequest>
  </env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <ns4:cancelRequestResponse
      xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <ns4:return>
        <ns1:divaStatus
          xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd">di
          vaStatus</ns1:divaStatus>
        </ns4:return>
      </ns4:cancelRequestResponse>
    </soapenv:Body>
  </soapenv:Envelope>
```

2.11.6 changeRequestPriority

Synopsis

Submits a Change Request Priority Request to the DIVArchive System.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

This function returns as soon as the DIVArchive WS accepts the request. To check that the operation was successful, the application must send the request **getRequestInfo**.

dws:changeRequestPriority

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
requestNumber	Int: Number identifying the Request to be changed.
priorityLevel	Int: The priorityLevel can be in the range [0...100]. The value 0 is the lowest priority and 100 the highest. There are five predefined values: • DIVA_REQUEST_PRIORITY_MIN = 0 • DIVA_REQUEST_PRIORITY_LOW = 25 • DIVA_REQUEST_PRIORITY_NORMAL = 50 • DIVA_REQUEST_PRIORITY_HIGH = 75 • DIVA_REQUEST_PRIORITY_MAX = 100 The use of DIVA_DEFAULT_REQUEST_PRIORITY = -1 is not allowed. Using another value (<i>out of the range [0...100] or predefined values</i>) yields a DIVA_ERR_INVALID_PARAMETER error.

Return Value

`dwsr:DivaStatusResponse`

Parameter	Description
<code>divaStatus</code>	Int: One of these <code>DIVA_STATUS</code> constants. Refer to Appendix A3 DIVArchive WS Status Codes.

Possible `divaStatus` codes include:

Request-Specific Status Codes

Status Code	Name	Description
1011	<code>DIVA_ERR_NO_SUCH_REQUEST</code>	<code>requestNumber</code> identifies no Request.

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

See also: `getRequestInfo`

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:changeRequestPriority
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd"
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
        ode</xs:sessionCode>
      <xs:requestNumber
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">requestN
        umber</xs:requestNumber>
      <xs:priorityLevel
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">priority
        Level</xs:priorityLevel>
    </p:changeRequestPriority>
  </env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Body>
<ns4:changeRequestPriorityResponse
xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <ns4:return>
    <ns1:divaStatus
xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd">divaStatus</ns1:divaStatus>
  </ns4:return>
</ns4:changeRequestPriorityResponse>
</soapenv:Body>
</soapenv:Envelope>
```

2.11.7 copy or copyToGroup

Synopsis

Submits a new Instance creation on the media specified by **mediaName** to the DIVArchive System and the DIVArchive System chooses the appropriate Instance to be created.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

This function returns as soon as the DIVArchive WS accepts the request. To check that the operation was successful, the application must send the request **getRequestInfo**.

In the event the requested Object is on media that is not available, the Request will fail. The Media Names (*Tape barcodes and Disk Names*) that contain Instances of the Object will be included in the **additionalInfo** field of the **getRequestInfo** response.

Note: There can be a maximum of only one Instance of each Object per Disk or Tape.

dws:copy or **dws:copyToGroup**

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
objectName	String: Name of the Object to be copied.
categoryName	String: Category assigned to the Object when it was archived. This parameter can be a null string (<i>this may result in an error if several Objects have the same name</i>).
instanceID	Int: Instance's Identifier. DIVA_ANY_INSTANCE = - 1 as the Instance ID means that DIVArchive will choose the appropriate Instance.

Parameter	Description
priorityLevel	Int: Level of priority for this Request. The priorityLevel can be in the range [0...100] or the value DIVA_DEFAULT_REQUEST_PRIORITY = -1. The value 0 is the lowest priority and 100 the highest. There are five predefined values: • DIVA_REQUEST_PRIORITY_MIN = 0 • DIVA_REQUEST_PRIORITY_LOW = 25 • DIVA_REQUEST_PRIORITY_NORMAL = 50 • DIVA_REQUEST_PRIORITY_HIGH = 75 • DIVA_REQUEST_PRIORITY_MAX = 100 Using the DIVA_DEFAULT_REQUEST_PRIORITY = -1 value, the DIVArchive WS uses the default priority for this request (<i>default request priority is defined in the DIVArchive WS configuration</i>). Using another value (<i>out of the range [0...100] or predefined values</i>) yields a DIVA_ERR_INVALID_PARAMETER error.
mediaName	String: Media (<i>Tape Group or Disk Array</i>) on which the new Instance will be located.

Return Value

dwsr:DivaObjectStatusResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.
requestNumber	Int: Number identifying the Request.

Possible `divaStatus` codes include:

Request-Specific Status Codes

Status Code	Name	Description
1009	<code>DIVA_ERR_OBJECT_DOESNT_EXIST</code>	The specified Object does not exist in the DIVArchive Database.
1010	<code>DIVA_ERR_SEVERAL_OBJECTS</code>	More than one Object with the specified name exists in the DIVArchive Database.
1017	<code>DIVA_ERR_GROUP_DOESNT_EXIST</code>	The Group does not exist.
1023	<code>DIVA_ERR_OBJECT_OFFLINE</code>	No available Instance for this Object. Tape Instances are ejected and no Actor could provide a Disk Instance.
1027	<code>DIVA_ERR_INSTANCE_DOESNT_EXIST</code>	The Instance specified for restoring this Object does not exist.
1028	<code>DIVA_ERR_INSTANCE_OFFLINE</code>	Instance specified for restoring this Object is ejected, or the Actor owning the specified Disk Instance is not available.
1031	<code>DIVA_ERR_OBJECT_IN_USE</code>	The Object is currently in use (<i>being Archived, Restored, Deleted, etc.</i>).
1036	<code>DIVA_ERR_OBJECT_PARTIALLY_DELETED</code>	The specified Object has Instances that are partially deleted.

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

See also: `archiveObject`

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
<env:Body>
<p:copy xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <xs:sessionCode
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
ode</xs:sessionCode>
  <xs:objectName
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectNa
me</xs:objectName>
  <xs:categoryName
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">category
Name</xs:categoryName>
  <xs:instanceID
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">instance
ID</xs:instanceID>
  <xs:priorityLevel
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">priority
Level</xs:priorityLevel>
  <xs:mediaName
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">mediaNam
e</xs:mediaName>
</p:copy>
</env:Body>
</env:Envelope>
```

OR

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
<env:Body>
<p:copyToGroup
xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <xs:sessionCode
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">830de954
-a35d-4c3a-8cfb-e617123521ee</xs:sessionCode>
  <xs:objectName
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">1</xs:ob
jectName>
  <xs:categoryName
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">1</xs:ca
tegoryName>
  <xs:instanceID
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">1</xs:in
stanceID>
```

```

    <xs:priorityLevel
      xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">1</xs:priorityLevel>

    <xs:mediaName
      xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">1</xs:mediaName>
  </p:copyToGroup>
</env:Body>
</env:Envelope>

```

REST Response Structure

```

<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <ns4:copyResponse
      xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <ns4:return
        xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:type="ns1:DivaObjectStatusResponse">
        <ns1:divaStatus>divaStatus</ns1:divaStatus>
        <ns1:requestNumber>requestNumber</ns1:requestNumber>
      </ns4:return>
    </ns4:copyResponse>
  </soapenv:Body>
</soapenv:Envelope>

```

OR

```

<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <ns4:copyToGroupResponse
      xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <ns4:return
        xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:type="ns1:DivaObjectStatusResponse">
        <ns1:divaStatus>divaStatus</ns1:divaStatus>

```

```
    <ns1:requestNumber>requestNumber</ns1:requestNumber>
  </ns4:return>
</ns4:copyToGroupResponse>
</soapenv:Body>
</soapenv:Envelope>
```

2.11.8 copyToNewObject

Synopsis

Submits Request for copying an archived Object to a new Object, with another Name and/or Category, to the DIVArchive System and the DIVArchive System chooses the appropriate Instance to be archived.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

This function returns as soon as the DIVArchive WS accepts the request. To check that the operation was successful, the application must send the request `getRequestInfo`.

In the event the requested Object is on media that is not available, the Request will fail. The Media Names (*Tape barcodes and Disk Names*) that contain Instances of the Object will be included in the `additionalInfo` field of the `getRequestInfo` response.

All types of transfers (*Disk->Disk, Disk->Tape, Tape->Disk, and Tape -> Tape*) are supported.

dws:copyToNewObject

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
objectName	String: Source Object Name.
objectCategory	String: Source Object Category.
objectMedia	String: Group/Array of the Source Object Instance (<i>optional</i>). If specified (<i>not empty</i>), DIVArchive will use that Instance as a Source.

Parameter	Description
objectInstanceID	Int: InstanceID of the Source Object Instance (<i>optional</i>). If specified (<i>not equal to</i> <code>DIVA_ANY_INSTANCE = -1</code>), DIVArchive will use that Instance as a Source. <code>objectMedia</code> will be ignored if <code>instanceID</code> is specified. If both Media and <code>instanceID</code> were not specified, DIVArchive will use the most suitable Instance (<i>providing the best performance</i>) as a Source.
newObjectName	String: Target Object Name.
newObjectCategory	String: Target Object Category. Either Object Name or Category (<i>or both</i>) must be different from Name/Category of the Source Object. Request will fail if Target Object already exists in DIVArchive.
newObjectInstanceMedia	String: Media Name where the first Instance of the new Object will be created.
comments	String: Target Object Comments (<i>optional</i>). If empty, comments from the Source Object are used.
priorityLevel	Int: Level of priority for this request. The <code>priorityLevel</code> can be in the range [0...100] or the value <code>DIVA_DEFAULT_REQUEST_PRIORITY = -1</code>. The value 0 is the lowest priority and 100 the highest. There are five predefined values: • <code>DIVA_REQUEST_PRIORITY_MIN = 0</code> • <code>DIVA_REQUEST_PRIORITY_LOW = 25</code> • <code>DIVA_REQUEST_PRIORITY_NORMAL = 50</code> • <code>DIVA_REQUEST_PRIORITY_HIGH = 75</code> • <code>DIVA_REQUEST_PRIORITY_MAX = 100</code> Using the <code>DIVA_DEFAULT_REQUEST_PRIORITY = -1</code> value, the DIVArchive WS uses the default priority for this request (<i>default request priority is defined in the DIVArchive WS configuration</i>). Using another value (<i>out of the range [0...100] or predefined values</i>) yields a <code>DIVA_ERR_INVALID_PARAMETER</code> error.

Return Value

`dwsr:DivaObjectStatusResponse`

Parameter	Description
<code>divaStatus</code>	Int: One of these <code>DIVA_STATUS</code> constants. Refer to Appendix A3 DIVArchive WS Status Codes.
<code>requestNumber</code>	Int: Number identifying the Request.

Possible `divaStatus` codes include:

Request-Specific Status Codes

Status Code	Name	Description
1009	<code>DIVA_ERR_OBJECT_DOESNT_EXIST</code>	The specified Object does not exist in the DIVArchive Database.
1010	<code>DIVA_ERR_SEVERAL_OBJECTS</code>	More than one Object with the specified name exists in the DIVArchive Database.
1016	<code>DIVA_ERR_OBJECT_ALREADY_EXISTS</code>	Target Object already exists in DIVArchive.
1017	<code>DIVA_ERR_GROUP_DOESNT_EXIST</code>	The Group does not exist.
1023	<code>DIVA_ERR_OBJECT_OFFLINE</code>	No available Instance for this Object. Tape Instances are ejected and no Actor could provide a Disk Instance.
1028	<code>DIVA_ERR_INSTANCE_OFFLINE</code>	Instance specified for restoring this Object is ejected, or the Actor owning the specified Disk Instance is not available.
1027	<code>DIVA_ERR_INSTANCE_DOESNT_EXIST</code>	Instance specified for restoring this Object does not exist.
1031	<code>DIVA_ERR_OBJECT_IN_USE</code>	The Object is currently in use (being Archived, Restored, Deleted, etc.).
1036	<code>DIVA_ERR_OBJECT_PARTIALLY_DELETED</code>	The specified Object has Instances that are partially deleted.

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

See Also: `copy` or `copyToGroup`

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
<env:Body>
<p:copyToNewObject
xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd"
  <xs:sessionCode
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
ode</xs:sessionCode>
  <xs:objectName
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectNa
me</xs:objectName>
  <xs:objectCategory
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectCa
tegory</xs:objectCategory>
  <xs:objectMedia
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectMe
dia</xs:objectMedia>
  <xs:objectInstanceID
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectIn
stanceID</xs:objectInstanceID>
  <xs:newObjectName
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">newObjec
tName</xs:newObjectName>
  <xs:newObjectCategory
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">newObjec
tCategory</xs:newObjectCategory>
  <xs:newObjectInstanceMedia
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">newObjec
tInstanceMedia</xs:newObjectInstanceMedia>
  <xs:comments
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">comments
</xs:comments>
  <xs:priorityLevel
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">priority
Level</xs:priorityLevel>
</p:copyToNewObject>
</env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Body>
<ns4:copyToNewObjectResponse
xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <ns4:return
xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="ns1:DivaObjectStatusResponse">
    <ns1:divaStatus>divaStatus</ns1:divaStatus>
    <ns1:requestNumber>requestNumber</ns1:requestNumber>
  </ns4:return>
</ns4:copyToNewObjectResponse>
</soapenv:Body>
</soapenv:Envelope>
```

2.11.9 deleteGroup

Synopsis

Deletes the Group passed as an argument. Deleting a Group is only possible when the Group is empty.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

dws:deleteGroup

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
groupName	String: Name of the Group to be deleted.

Return Value

dwsr:DivaStatusResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.

Possible **divaStatus** codes include:

Request-Specific Status Codes

Status Code	Name	Description
1017	DIVA_ERR_GROUP_DOESNT_EXIST	The Group does not exist.
1022	DIVA_ERR_GROUP_IN_USE	The Group contains at least one Object Instance.

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:deleteGroup
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
        ode</xs:sessionCode>
      <xs:groupName
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">groupNam
        e</xs:groupName>
    </p:deleteGroup>
  </env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <ns4:deleteGroupResponse
      xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <ns4:return>
        <ns1:divaStatus
          xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd">di
          vaStatus</ns1:divaStatus>
        </ns4:return>
      </ns4:deleteGroupResponse>
    </soapenv:Body>
  </soapenv:Envelope>
```

2.11.10 *deleteInstance*

Synopsis

Deletes an Object Instance.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

dws:deleteInstance

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
objectName	String: Name of the Object to be deleted.
categoryName	String: Category assigned to the Object when it was archived. This parameter can be a null string (<i>this may result in an error if several Objects have the same name</i>).
instanceID	Int: Instance's Identifier.

Parameter	Description
priorityLevel	Int: Level of priority for this request. The priorityLevel can be in the range [0...100] or the value DIVA_DEFAULT_REQUEST_PRIORITY = -1. The value 0 is the lowest priority and 100 the highest. There are five predefined values: • DIVA_REQUEST_PRIORITY_MIN = 0 • DIVA_REQUEST_PRIORITY_LOW = 25 • DIVA_REQUEST_PRIORITY_NORMAL = 50 • DIVA_REQUEST_PRIORITY_HIGH = 75 • DIVA_REQUEST_PRIORITY_MAX = 100 Using the DIVA_DEFAULT_REQUEST_PRIORITY = -1 value, the DIVArchive WS uses the default priority for this request (<i>default request priority is defined in the DIVArchive WS configuration</i>). Using another value (<i>out of the range [0...100] or predefined values</i>) yields a DIVA_ERR_INVALID_PARAMETER error.

Return Value

dwsr:DivaObjectStatusResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.
requestNumber	Int: Number identifying the Request.

Possible **divaStatus** codes include:

Request-Specific Status Codes

Status Code	Name	Description
1009	DIVA_ERR_OBJECT_DOESNT_EXIST	The specified Object does not exist in the DIVArchive Database.
1010	DIVA_ERR_SEVERAL_OBJECTS	More than one Object with the specified name exists in the DIVArchive Database.

Status Code	Name	Description
1025	DIVA_ERR_LAST_INSTANCE	<code>deleteObject</code> must be used to delete the last Instance of an Object.
1027	DIVA_ERR_INSTANCE_DOESNT_EXIST	The specified Instance does not exist.
1031	DIVA_ERR_OBJECT_IN_USE	The Object is currently in use (<i>being Archived, Restored, Deleted, etc.</i>).
1036	DIVA_ERR_OBJECT_PARTIALLY_DELETED	The specified Object has Instances that are partially deleted.

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

See also: `getObjectInfo`

REST Request Structure

```

<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:deleteInstance
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
        ode</xs:sessionCode>
      <xs:objectName
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectNa
        me</xs:objectName>
      <xs:categoryName
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">category
        Name</xs:categoryName>
      <xs:instanceID
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">instance
        ID</xs:instanceID>
      <xs:priorityLevel
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">priority
        Level</xs:priorityLevel>
    </p:deleteInstance>
  </env:Body>
</env:Envelope>

```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Body>
<ns4:deleteInstanceResponse
xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <ns4:return
xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="ns1:DivaObjectStatusResponse">
    <ns1:divaStatus>divaStatus</ns1:divaStatus>
    <ns1:requestNumber>requestNumber</ns1:requestNumber>
  </ns4:return>
</ns4:deleteInstanceResponse>
</soapenv:Body>
</soapenv:Envelope>
```

2.11.11 *deleteInstancebyMediaName*

Synopsis

Deletes an Object with the specified name that is contained within the specified media.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

dws:deleteInstancebyMediaName

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
objectName	String: Name of Object to be deleted.
categoryName	String: Category that contains the Object to be deleted.
mediaName	String: Name of the Media on which to look for the Object.
priorityLevel	Int: Level of priority for this request. The priorityLevel can be in the range [0...100] or the value DIVA_DEFAULT_REQUEST_PRIORITY = -1. The value 0 is the lowest priority and 100 the highest. There are five predefined values: • DIVA_REQUEST_PRIORITY_MIN = 0 • DIVA_REQUEST_PRIORITY_LOW = 25 • DIVA_REQUEST_PRIORITY_NORMAL = 50 • DIVA_REQUEST_PRIORITY_HIGH = 75 • DIVA_REQUEST_PRIORITY_MAX = 100 Using the DIVA_DEFAULT_REQUEST_PRIORITY = -1 value, the DIVArchive WS uses the default priority for this request (<i>default request priority is defined in the DIVArchive WS configuration</i>). Using another value (<i>out of the range [0...100] or predefined values</i>) yields a DIVA_ERR_INVALID_PARAMETER error.

Return Value

`dwsr:DivaObjectStatusResponse`

Parameter	Description
<code>divaStatus</code>	Int: One of these <code>DIVA_STATUS</code> constants. Refer to Appendix A3 DIVArchive WS Status Codes.
<code>requestNumber</code>	Int: Number identifying the Request.

Possible `divaStatus` codes include:

Request-Specific Status Codes

Status Code	Name	Description
1009	<code>DIVA_ERR_OBJECT_DOESNT_EXIST</code>	The specified Object does not exist in the DIVArchive Database.
1010	<code>DIVA_ERR_SEVERAL_OBJECTS</code>	More than one Object with the specified name exists in the DIVArchive Database.
1025	<code>DIVA_ERR_LAST_INSTANCE</code>	<code>deleteObject</code> must be used to delete the last Instance of an Object.
1027	<code>DIVA_ERR_INSTANCE_DOESNT_EXIST</code>	The specified Instance does not exist.
1031	<code>DIVA_ERR_OBJECT_IN_USE</code>	The Object is currently in use (<i>being Archived, Restored, Deleted, etc.</i>).
1036	<code>DIVA_ERR_OBJECT_PARTIALLY_DELETED</code>	The specified Object has Instances that are partially deleted.

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:deleteInstancebyMediaName
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
        ode</xs:sessionCode>
      <xs:objectName
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectNa
        me</xs:objectName>
      <xs:categoryName
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">category
        Name</xs:categoryName>
      <xs:mediaName
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">mediaNam
        e</xs:mediaName>
      <xs:priorityLevel
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">priority
        Level</xs:priorityLevel>
    </p:deleteInstancebyMediaName>
  </env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <ns4:deleteInstancebyMediaNameResponse
      xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <ns4:return
        xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:type="ns1:DivaObjectStatusResponse">
        <ns1:divaStatus>divaStatus</ns1:divaStatus>
        <ns1:requestNumber>requestNumber</ns1:requestNumber>
      </ns4:return>
    </ns4:deleteInstancebyMediaNameResponse>
  </soapenv:Body>
</soapenv:Envelope>
```

2.11.12 *deleteObject*

Synopsis

Submits an Object Delete Request to the DIVArchive WS.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

The DIVArchive WS deletes every Instance of the Object. This function returns as soon as the DIVArchive WS accepts the Request. To check that the operation was successful, the application must send the request `getRequestInfo`.

dws:deleteObject

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
objectName	String: Name of the Object to be deleted.
objectCategory	String: Category assigned to the Object when it was archived. This parameter can be a null string (<i>this may result in an error if several Objects have the same name</i>).
priorityLevel	Int: Level of priority for this request. The <code>priorityLevel</code> can be in the range [0...100] or the value <code>DIVA_DEFAULT_REQUEST_PRIORITY = -1</code>. The value 0 is the lowest priority and 100 the highest. There are five predefined values: • <code>DIVA_REQUEST_PRIORITY_MIN = 0</code> • <code>DIVA_REQUEST_PRIORITY_LOW = 25</code> • <code>DIVA_REQUEST_PRIORITY_NORMAL = 50</code> • <code>DIVA_REQUEST_PRIORITY_HIGH = 75</code> • <code>DIVA_REQUEST_PRIORITY_MAX = 100</code> Using the <code>DIVA_DEFAULT_REQUEST_PRIORITY = -1</code> value, the

Parameter	Description
	DIVArchive WS uses the default priority for this request (<i>default request priority is defined in the DIVArchive WS configuration</i>). Using another value (<i>out of the range [0...100] or predefined values</i>) yields a <code>DIVA_ERR_INVALID_PARAMETER</code> error.

Return Value

`dwsr:DivaObjectStatusResponse`

Parameter	Description
<code>divaStatus</code>	Int: One of these <code>DIVA_STATUS</code> constants. Refer to Appendix A3 DIVArchive WS Status Codes.
<code>requestNumber</code>	Int: Number identifying the Request.

Possible `divaStatus` codes include:

Request-Specific Status Codes

Status Code	Name	Description
1009	<code>DIVA_ERR_OBJECT_DOESNT_EXIST</code>	The specified object does not exist in the DIVArchive Database and is not being archived.
1010	<code>DIVA_ERR_SEVERAL_OBJECTS</code>	More than one Object with the specified name exists in the DIVArchive Database.
1031	<code>DIVA_ERR_OBJECT_IN_USE</code>	The specified object is currently being read or deleted.

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

See also: `getRequestInfo` and `deleteInstance`

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:deleteObject
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
        ode</xs:sessionCode>
      <xs:objectName
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectNa
        me</xs:objectName>
      <xs:objectCategory
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectCa
        tegory</xs:objectCategory>
      <xs:priorityLevel
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">priority
        Level</xs:priorityLevel>
    </p:deleteObject>
  </env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <ns4:deleteObjectResponse
      xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <ns4:return
        xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:type="ns1:DivaObjectStatusResponse">
        <ns1:divaStatus>divaStatus</ns1:divaStatus>
        <ns1:requestNumber>requestNumber</ns1:requestNumber>
      </ns4:return>
    </ns4:deleteObjectResponse>
  </soapenv:Body>
</soapenv:Envelope>
```

2.11.13 ejectTape

Synopsis

Submits an Eject Request to DIVArchive.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

This request completes when the specified Tapes are outside the library.

If at least one of the Tapes does not exist, is already ejected, or is currently in use by another request, the `DIVA_ERR_INVALID_PARAMETER` status code is returned and no Tapes are ejected.

dwsi:ejectTape

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
vsList	List of String: VSN (<i>barcodes</i>) for identifying the tapes to be ejected. To specify more than one VSN multiple vsList parameters must be used as shown below: <pre><!--1 or more repetitions--> <xsd1:vsList>VSN1</xsd1:vsList> <xsd1:vsList>VSN2</xsd1:vsList></pre>
release	Boolean: When true, perform a release on every Instance located on the successfully ejected tapes. Acceptable values are true/false or 1/0.
comment	String: Externalization comment.

Parameter	Description
priorityLevel	Int: Level of priority for this request. The priorityLevel can be in the range [0...100] or the value DIVA_DEFAULT_REQUEST_PRIORITY = -1. The value 0 is the lowest priority and 100 the highest. There are five predefined values: • DIVA_REQUEST_PRIORITY_MIN = 0 • DIVA_REQUEST_PRIORITY_LOW = 25 • DIVA_REQUEST_PRIORITY_NORMAL = 50 • DIVA_REQUEST_PRIORITY_HIGH = 75 • DIVA_REQUEST_PRIORITY_MAX = 100 Using the DIVA_DEFAULT_REQUEST_PRIORITY = -1 value, the DIVArchive WS uses the default priority for this request (<i>default request priority is defined in the DIVArchive WS configuration</i>). Using another value (<i>out of the range [0...100] or predefined values</i>) yields a DIVA_ERR_INVALID_PARAMETER error.

Return Value

dwsr:DivaObjectStatusResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.
requestNumber	Int: Number identifying the Request.

Request-Specific Status Codes

Status Code	Name	Description
1033	DIVA_ERR_TAPE_DOESNT_EXIST	There is no Tape associated with the given barcode.

Possible **divaStatus** codes include:

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

See also: **insertTape**

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
<env:Body>
<p:ejectTape
xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <xs:sessionCode
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
ode</xs:sessionCode>
  <xs:vsList
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">vsList<
/xs:vsList>
  <xs:release
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">release<
/xs:release>
  <xs:comment
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">comment<
/xs:comment>
  <xs:priorityLevel
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">priority
Level</xs:priorityLevel>
</p:ejectTape>
</env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Body>
<ns4:ejectTapeResponse
xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <ns4:return
xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="ns1:DivaObjectStatusResponse">
    <ns1:divaStatus>divaStatus</ns1:divaStatus>
    <ns1:requestNumber>requestNumber</ns1:requestNumber>
  </ns4:return>
</ns4:ejectTapeResponse>
</soapenv:Body>
</soapenv:Envelope>
```

2.11.14 enableAutomaticRepack

Synopsis

Enable or disable the Automatic Repack Scheduling in the DIVArchive System.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

When the Automatic Repack Scheduling is enabled, the schedule defined in the Control GUI is applied and Tapes belonging to Groups for which Repack is allowed may be repacked, according to the other Automatic Repack settings.

When the Automatic Repack Scheduling is disabled, the schedule is ignored, all running automatic repack requests may be cancelled (*or not, according to other Automatic Repack settings*), and no other Automatic Repack Requests will be started until the Automatic Repack Scheduling is turned on again (*from this API or from the Control GUI*).

dws:enableAutomaticRepack

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
enable	Boolean: True to enable Automatic Repack Scheduling, False to disable. Acceptable values are true/false or 1/0.

Return Value

dwsr:DivaObjectStatusResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.
requestNumber	Int: Number identifying the Request.

Possible `divaStatus` codes include:

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:enableAutomaticRepack
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
        ode</xs:sessionCode>
      <xs:enable
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">enable</
        xs:enable>
    </p:enableAutomaticRepack>
  </env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <ns4:enableAutomaticRepackResponse
      xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <ns4:return>
        <ns1:divaStatus
          xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd">di
          vaStatus</ns1:divaStatus>
        </ns4:return>
      </ns4:enableAutomaticRepackResponse>
    </soapenv:Body>
  </soapenv:Envelope>
```

2.11.15 *getArchiveSystemInfo*

Synopsis

Retrieves general information about the DIVArchive System.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

Note: A DIVArchive System communicates with a robotic system composed of one or more independent ACS (*Automated Cartridge Systems*). The ACS is composed of one or more LSM (*Library Storage Modules*) that can exchange tapes through a PTP (*Pass Through Port*). Each drive is located in a LSM.

dws: getArchiveSystemInfo

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
options	String: No options have been defined for this command, may be empty or null.

Return Value

dwsr: ArchiveSystemInfoResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.
info	DivaGeneralInfo: Container for DIVArchive general Information.

Parameter	Description
actorsDrivesList	List of Drives associated with an Actor.
capSize	Int: Number of slots in the default CAP.
currentRequests	List of Int: Current requests being executed.
drivesList	List of DivaDriveDesc: Drives descriptions.
firstUsedRequestId	Int: First request ID used by current DIVArchive WS session. -1 if no requests have been processed.
lastUsedRequestId	Int: Last request ID used by current DIVArchive WS session. -1 if no requests have been processed.
libStatus	Int: DIVA_LIBRARY_OK if at least one ACS is online. Possible values include: • DIVA_LIBRARY_OK = 0 • DIVA_LIBRARY_OUT_OF_ORDER = 1 • DIVA_LIBRARY_STATE_UNKNOWN = 2
lsmList	List of DivaLSMDesc: List of LSM descriptions.
numOfAvailableActors	Int: The number of Actors currently running.
numOfAvailableDisks	Int: The number of Drives currently ONLINE.
numOfAvailableDrives	Int: The number of Disks currently ONLINE.
numberOfBlankTapes	Int: Number of blank Tapes that are in a Set associated with at least one Group. Tape(s) may be externalized or write disabled.
pendingRequests	List of Int: Requests queued for execution.
remainSizeOnTapes	Long: In Giga Bytes = Sum of remaining size on Tapes that are online, in a Set associated with at least one Group, in a ACS where DIVArchive has a Drive, and Writable, and of the remaining size on Disks accepting permanent storage. <i>(Note Only Disks that are currently visible are used in the sum).</i>
siteIpAddress	String: DIVArchive WS IP Address.
siteName	String: Name of the main site as entered in the Configuration Utility.

Parameter	Description
sitePort	Int: DIVArchive WS port number
status	Int: Gives the status of the DIVArchive WS. Possible values include: • <code>DIVA_IS_ON</code> = 0 • <code>DIVA_IS_OFF</code> = 1 • <code>DIVA_GLOBAL_STATE_IS_UNKNOWN</code> = 2
totalNumberOfObjects	Int: Number of Objects managed by this DIVArchive System.
totalSizeOnTapes	Long: In Giga Bytes = Sum of the total size of all Tapes available for DIVArchive (<i>i.e. in a Set associated with at least one Group</i>) and of the total size of all Disks accepting storage (<i>known only if Disk is currently visible</i>).

dwsmd:DivaActorAndDrivesDesc

Parameter	Description
actorName	String: Name of the Actor.
actorAddress	String: Address for interfacing with the Actor.
actorIsAvailable	Boolean: True if the Actor is currently accepting requests. Acceptable values are <code>true/false</code> or 1/0.
connectedDrives	String: List of connected Drives.
repackEnabled	Boolean: True if Repacking is enabled. Acceptable values are <code>true/false</code> or 1/0.
classicEnabled	Boolean: Kept for compatibility only. True only if all seven standard operations are enabled. Acceptable values are <code>true/false</code> or 1/0.
cacheArchiveEnabled	Boolean: The seven standard operations (<i>detailed in 5.0</i>). Acceptable values are <code>true/false</code> or 1/0.
directArchiveEnabled	Boolean: True if the Actor accepts archive requests. Acceptable values are <code>true/false</code> or 1/0.
cacheRestoreEnabled	Boolean: True if the Actor allows restoring from the cache. Acceptable values are <code>true/false</code> or 1/0.

Parameter	Description
directRestoreEnabled	Boolean: True if the Actor accepts restorative requests. Acceptable values are true/false or 1/0.
associativeCopyEnabled	Boolean: True if the Actor accepts associativeCopy requests. Acceptable values are true/false or 1/0.
deleteEnabled	Boolean: True if the Actor accepts deletion requests. Acceptable values are true/false or 1/0.
copyToGroupEnabled	Boolean: True if the Actor allows Objects to be copied to a Group. Acceptable values are true/false or 1/0.
cacheForRepack	Int: Cache space available to Repack (%).

dwsmd:DivaDriveDesc

Parameter	Description
driveName	String: Drive user-friendly name.
driveTypeID	Int: Drive Type ID.
driveType	String: Drive Type Name.
lsmID	Int: ID of the LSM containing the Drive.
driveIsAvailable	Boolean: True if Drive is available for DIVArchive. Acceptable values are true/false or 1/0.
repackEnabled	Boolean: True if Drive accepts Repack Requests. Acceptable values are true/false or 1/0.
classicEnabled	Boolean: True if Drive accepts Standard Requests. Acceptable values are true/false or 1/0.

dwsmd:DivaLSMDesc

Parameter	Description
lsmName	String: User-friendly Library Storage.
lsmID	Int: LSM Unique ID.
lsmIsAvailable	Boolean: True if this LSM is available. Acceptable values are true/false or 1/0.

Possible `divaStatus` codes include:

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:getArchiveSystemInfo
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
        ode</xs:sessionCode>
      <xs:options
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">options<
        /xs:options>
    </p:getArchiveSystemInfo>
  </env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <ns4:getArchiveSystemInfoResponse
      xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <ns4:return
        xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:type="ns1:ArchiveSystemInfoResponse">
        <ns1:divaStatus>divaStatus</ns1:divaStatus>
        <ns1:info>
          <actorsDrivesList
            xmlns="http://model.api.ws.diva.fpdigital.com/xsd">
            <actorName>actorName</actorName>
            <actorAddress>actorAddress</actorAddress>
            <actorIsAvailable>actorIsAvailable</actorIsAvailable>
            <connectedDrives>connectedDrives1</connectedDrives>
            <connectedDrives>connectedDrives2</connectedDrives>
            <repackEnabled>repackEnabled</repackEnabled>
            <classicEnabled>classicEnabled</classicEnabled>
            <cacheArchiveEnabled>cacheArchiveEnabled</cacheArchiveEnabled>
          </actorsDrivesList>
          <directArchiveEnabled>directArchiveEnabled</directArchiveEnabled>
        </ns1:info>
      </ns4:return>
    </ns4:getArchiveSystemInfoResponse>
  </soapenv:Body>
</soapenv:Envelope>
```

```

    <cacheRestoreEnabled>cacheRestoreEnabled</cacheRestoreEnabled>

<directRestoreEnabled>directRestoreEnabled</directRestoreEnabled>
    <deleteEnabled>deleteEnabled</deleteEnabled>
    <copyToGroupEnabled>copyToGroupEnabled</copyToGroupEnabled>

<associativeCopyEnabled>associativeCopyEnabled</associativeCopyEnabled>
    <cacheForRepack>cacheForRepack</cacheForRepack>
</actorsDrivesList>

<ns2:capSize
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">capSize</
ns2:capSize>

<ns2:currentRequests
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd"
xsi:nil="1"/>

<drivesList xmlns="http://model.api.ws.diva.fpdigital.com/xsd">
    <driveName>driveName1</driveName>
    <driveTypeID>driveTypeID</driveTypeID>
    <driveType>driveType</driveType>
    <lsmID>lsmID</lsmID>
    <driveIsAvailable>driveIsAvailable</driveIsAvailable>
    <repackEnabled>repackEnabled</repackEnabled>
    <classicEnabled>classicEnabled</classicEnabled>
</drivesList>

<drivesList xmlns="http://model.api.ws.diva.fpdigital.com/xsd">
    <driveName>driveName2</driveName>
    <driveTypeID>driveTypeID</driveTypeID>
    <driveType>driveType</driveType>
    <lsmID>lsmID</lsmID>
    <driveIsAvailable>driveIsAvailable</driveIsAvailable>
    <repackEnabled>repackEnabled</repackEnabled>
    <classicEnabled>classicEnabled</classicEnabled>
</drivesList>

<ns2:firstUsedRequestId
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">firstUsed
RequestId</ns2:firstUsedRequestId>

<ns2:lastUsedRequestId
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">lastUsedR
equestId</ns2:lastUsedRequestId>

<ns2:libStatus
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">libStatus
</ns2:libStatus>

```

```

<lsmList xmlns="http://model.api.ws.diva.fpdigital.com/xsd">
  <lsmName>lsmName</lsmName>
  <lsmID>lsmID</lsmID>
  <lsmIsAvailable>lsmIsAvailable</lsmIsAvailable>
</lsmList>

<ns2:numOfAvailableActors
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">numOfAvai
lableActors</ns2:numOfAvailableActors>

<ns2:numOfAvailableDisks
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">numOfAvai
lableDisks</ns2:numOfAvailableDisks>

<ns2:numOfAvailableDrives
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">numOfAvai
lableDrives</ns2:numOfAvailableDrives>

<ns2:numberOfBlankTapes
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">numberOfB
lankTapes</ns2:numberOfBlankTapes>

<ns2:pendingRequests
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd"
xsi:nil="1"/>

<ns2:remainSizeOnTapes
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">remainSiz
eOnTapes</ns2:remainSizeOnTapes>

<ns2:siteIpAddress
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">siteIpAdd
ress</ns2:siteIpAddress>

<ns2:siteName
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">siteName<
/ns2:siteName>

<ns2:sitePort
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">sitePort<
/ns2:sitePort>

<ns2:status
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">status</n
s2:status>

<ns2:totalNumberOfObjects
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">totalNumb
erOfObjects</ns2:totalNumberOfObjects>

<ns2:totalSizeOnTapes
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">totalSize
OnTapes</ns2:totalSizeOnTapes>

</ns1:info>
</ns4:return>
</ns4:getArchiveSystemInfoResponse>
</soapenv:Body>
</soapenv:Envelope>

```

2.11.16 *getArrayList*

Synopsis

The purpose of this function is to provide a list of Arrays and Disks associated with the Arrays in the DIVArchive System. It will even return Arrays which don't have any Disks associated with them.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
options	String: No options have been defined for this command, may be empty or null.

Return Value

dwsr:DivaArrayListResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.
arraysInfo	DivaArrayDesc: Container for DIVA Arrays Info.

dwsmd:DivArrayDesc

Parameter	Description
arrayDesc	String: Description of the Array.
arrayName	String: Name of the Array.
mediaFormatId	Int: Data format to be used by the disks assigned to this group. • DIVA_MEDIA_FORMAT_LEGACY = 0 • DIVA_MEDIA_FORMAT_AXF = 1
numberOfDisk	Int: Number of disks within the Array.
arrayDiskList	List of Disk Arrays.

dwsmd:DivDiskArray

Parameter	Description
diskCurrentRemainingSize	Long: Disk current remaining size.
diskIsWritable	Boolean: Flag to check if Disk is writable or not. Available options are true , false , 1 , or 0 .
diskMaxThroughput	Long: Maximum throughput of Disk.
diskMinFreeSpace	Long: Minimum free space available on Disk.
diskName	String: Name of the Disk.
diskSite	String: Disk Site
diskStatus	Int: Disk Status
diskTotalSize	Long: Disk Total Size
diskArrayName	String: Name of the Array.

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:getArrayList
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
        ode</xs:sessionCode>
      <xs:options
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">options<
        /xs:options>
    </p:getArrayList>
  </env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <ns4:getArrayListResponse
      xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <ns4:return
        xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:type="ns1:DivaArrayListResponse">
        <ns1:divaStatus>divaStatus</ns1:divaStatus>
        <ns1:arraysInfo>
          <ns2:arrayDesc
            xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">arrayDesc
          </ns2:arrayDesc>
          <ns2:arrayName
            xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">arrayName
          </ns2:arrayName>
          <ns2:numberOfDisk
            xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">numberOfD
            isk</ns2:numberOfDisk>
          <ns2:arrayDiskList
            xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd"
            xsi:nil="1"/>
        </ns1:arraysInfo>
        <ns1:arraysInfo>
```

```

    <ns2:arrayDesc
      xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">arrayDesc
    </ns2:arrayDesc>

    <ns2:arrayName
      xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">arrayName
    </ns2:arrayName>

    <ns2:numberOfDisk
      xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">numberOfDisk</ns2:numberOfDisk>

    <arrayDiskList
      xmlns="http://model.api.ws.diva.fpdigital.com/xsd">

      <diskCurrentRemainingSize>diskCurrentRemainingSize</diskCurrentRemainingSize>

      <diskIsWritable>diskIsWritable</diskIsWritable>

      <diskMaxThroughput>diskMaxThroughput</diskMaxThroughput>

      <diskMinFreeSpace>diskMinFreeSpace</diskMinFreeSpace>

      <diskName>diskName</diskName>

      <diskSite>diskSite</diskSite>

      <diskStatus>diskStatus</diskStatus>

      <diskTotalSize>diskTotalSize</diskTotalSize>

      <diskArrayName xsi:nil="1"/>

    </arrayDiskList>
  </ns1:arraysInfo>
</ns4:return>
</ns4:getArrayListResponse>
</soapenv:Body>
</soapenv:Envelope>

```

2.11.17 *getFinishedRequestList*

Synopsis

Get all of the requests which have finished, starting from the specified number of seconds before the present. Finished requests are requests that have completed normally or aborted.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

This method is called successively to get the complete list of requests. The first time the method is called the `initialTime` is set. This parameter is the number of seconds ago to start the list. Successive calls set the `initialTime` to a constant value, and set the `listPosition` parameter with the value returned from the previous call. Once all of the Requests have been returned, a call to this method will return an empty list.

dws: getFinishedRequestList

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
maxFetch	Int: Maximum number of <code>requestInfo</code> objects to retrieve.
initialTime	Int: The <code>initialTime</code> attribute is the time to start the search from and is represented as the number of seconds until the current time. Requests that have finished between the present and this number of seconds ago will be retrieved. This value must be between 1 and 259200, which represents 3 days. This parameter is to be set only the first time this method is called. Subsequent calls must set this to <code>DIVA_CONTINUE</code> (<code>DIVA_CONTINUE = 0</code>).

Parameter	Description
uniqueID	Unique identifier used to point to the last request retrieved by the previous call to this method. This parameter is not applicable when initialTime is other than DIVA_CONTINUE (DIVA_CONTINUE = 0) and null is allowed. When initialTime is equal to DIVA_CONTINUE (DIVA_CONTINUE = 0), set this parameter to the object that was returned by the previous call to this method.

Return Value

dwsr:DivaRequestListInfoResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.
uniqueId	String: Unique identifier used to point to the last request retrieved by the previous call to this method. This parameter is not applicable when initialTime is other than DIVA_CONTINUE (DIVA_CONTINUE = 0) and null is allowed. When initialTime is equal to DIVA_CONTINUE (DIVA_CONTINUE = 0), set this parameter to the object that was returned by the previous call to this method.
requestInfoList	List of DivaRequestInfo: Container for resultant data. See the description of getRequestInfo .

dwsr:DivaRequestInfo

Parameter	Description
abortionReason	DivaAbortionReason: Information about why the Request was aborted, if it was.
additionalInfo	String: See 2.10.22.1 below for more information on the use of this field

Parameter	Description
currentPriority	Int: Level of priority for this Request. The priorityLevel can be in the range [0...100] or the value DIVA_DEFAULT_REQUEST_PRIORITY. The value 0 is the lowest priority and 100 the highest. There are five predefined values: • DIVA_REQUEST_PRIORITY_MIN = 0 • DIVA_REQUEST_PRIORITY_LOW = 25 • DIVA_REQUEST_PRIORITY_NORMAL = 50 • DIVA_REQUEST_PRIORITY_HIGH = 75 • DIVA_REQUEST_PRIORITY_MAX = 100 Using the DIVA_DEFAULT_REQUEST_PRIORITY = -1 value, the DIVArchive WS uses the default priority for this request (<i>default request priority is defined in the DIVArchive WS configuration</i>). Using another value (<i>out of the range [0...100] or predefined values</i>) yields a DIVA_ERR_INVALID_PARAMETER error.
objectSummary	DivaObjectSummary: Container for the Object summary Information that this request involves. See DivaObjectSummary structure.
progress	Int: From 0 to 100 (%) if requestState is DIVA_RUNNING.
repackTapes	List of DivaRepackTapesInfo: Container for information about Tapes Repacking.
requestNumber	Long: Number identifying the Request.
requestState	Int: Integer value corresponding to the current state of the queried request. • DIVA_COMPLETED = 3 • DIVA_ABORTED = 4 • DIVA_CANCELLED = 5 • DIVA_UNKNOWN_STATE = 6 • DIVA_PARTIALLY_ABORTED = 11 • DIVA_RUNNING = 12

Parameter	Description
requestType	Int: Integer value corresponding to the type of request queried request. • DIVA_ARCHIVE_REQUEST = 0 • DIVA_RESTORE_REQUEST = 1 • DIVA_DELETE_REQUEST = 2 • DIVA_EJECT_REQUEST = 3 • DIVA_INSERT_REQUEST = 4 • DIVA_COPY_REQUEST = 5 • DIVA_COPY_TO_NEW_REQUEST = 6 • DIVA_RESTORE_INSTANCE_REQUEST = 7 • DIVA_DELETE_INSTANCE_REQUEST = 8 • DIVA_UNKNOW_REQUEST_TYPE = 9 • DIVA_AUTOMATIC_REPACK_REQUEST = 10 • DIVA_ONDEMAND_RAPACK_REQUEST = 11 • DIVA_ASSOC_COPY_REQUEST = 12 • DIVA_PARTIAL_RESTORE_REQUEST = 13 • DIVA_MULTIPLE_RESTORE_REQUEST = 14 • DIVA_TRANSCODE_ARCHIVED_REQUEST = 15 • DIVA_EXPORT_REQUEST = 16 • DIVA_TRANSFER_REQUEST = 17 • DIVA_AUTOMATIC_VERIFY_TAPES_REQUEST = 18 • DIVA_MANUAL_VERIFY_TAPES_REQUEST = 19

Parameter	Description
description	String: If the request was aborted then this is an integer value corresponding to the reason why the queried request was aborted. If the request was not aborted then abortionReason will be DIVA_AR_NONE = 0. • DIVA_AR_NONE = 0 ○ Request not aborted • DIVA_AR_DRIVE = 1 ○ Drive troubles • DIVA_AR_TAPE = 2 ○ Tape troubles • DIVA_AR_ACTOR = 3 ○ Actor troubles • DIVA_AR_DISK = 4 ○ Disk troubles • DIVA_AR_DISK_FULL = 5 ○ Disk is full • DIVA_AR_SOURCE_DEST = 6 ○ Source/destination troubles • DIVA_AR_RESOURCES = 7 ○ Resources attribution troubles • DIVA_AR_LIBRARY = 8 ○ Library troubles • DIVA_AR_PARAMETERS = 9 ○ Wrong request parameters • DIVA_AR_UNKNOWN = 10 ○ Unknown code • DIVA_AR_INTERNAL = 11 ○ Internal DIVArchive WS error
description	String: More detailed information on why the Request was aborted.

dwsM:DivaObjectSummary

Parameter	Description
objectCategory	String : Category that the source Object is in.
objectName	String : Name of the source Object.

dwsM:DivaRepackTapesInfo

Parameter	Description
destinationTape	String : Tape to Repack data to.
sourceTape	String : Tape to Repack data from.

Possible **divaStatus** codes include:

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:getFinishedRequestList
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
        ode</xs:sessionCode>
      <xs:maxFetch
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">maxFetch
      </xs:maxFetch>
      <xs:initialTime
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">initialT
        ime</xs:initialTime>
    </p:getFinishedRequestList>
  </env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>

<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <ns4:getFinishedRequestListResponse
xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <ns4:return
xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="ns1:DivaRequestListInfoResponse">
        <ns1:divaStatus>divaStatus</ns1:divaStatus>
        <ns1:requestInfoList>
          <abortionReason
xmlns="http://model.api.ws.diva.fpdigital.com/xsd">
            <code>code</code>
            <description>description</description>
          </abortionReason>
          <ns2:additionalInfo
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd"/>
            <ns2:currentPriority
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">currentPr
iority</ns2:currentPriority>
            <objectSummary
xmlns="http://model.api.ws.diva.fpdigital.com/xsd">
              <objectCategory>objectCategory</objectCategory>
              <objectName>objectName</objectName>
            </objectSummary>
            <ns2:progress
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">progress<
/ns2:progress>
            <repackTapes xmlns="http://model.api.ws.diva.fpdigital.com/xsd">
              <destinationTape>destinationTape</destinationTape>
              <sourceTape>sourceTape</sourceTape>
            </repackTapes>
            <ns2:requestNumber
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">requestNu
mber</ns2:requestNumber>
            <ns2:requestState
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">requestSt
ate</ns2:requestState>
```

```
<ns2:requestType
  xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">requestTy
pe</ns2:requestType>
</ns1:requestInfoList>
</ns4:return>
</ns4:getFinishedRequestListResponse>
</soapenv:Body>
</soapenv:Envelope>
```

2.11.18 *getFilesAndFolders*

Synopsis

Gets the names of the files and folders for the specified Object from DIVArchive. This function is included to support Complex Objects, but is valid for any Object. In order to get all of the file and folder names for an object, the user sets the **startIndex** to one (1). A list of names of the size specified is returned. The user then sets **startIndex** to the value of **nextStartIndex** and again makes the function call. Continue this until the return value of **noMoreObjects** returns **true**.

Version

This request is available in the DIVArchive WS API since version DIVArchiveWS 2.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

This method is called successively to get the complete list of requests. The first time the method is called the **nextStartIndex** is set. This parameter is the number of the record to start from.

dws: getFilesAndFolders

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
objectName	String: Name of the Object.
Category	String: Category that the Object is in.
startIndex	Int: The position in the list to start this iteration. Set at 1 (<i>one</i>) to start at the beginning. Values less than 1 are not valid. Set startIndex equal to nextStartIndex as returned in DIVA_FILES_AND_FOLDERS for all subsequent calls.
batchSize	Int: The maximum size of the returned list of objects. Must be set to a value no greater than 1000; the recommended setting is 500. Note: This value is only a suggestion and may be overridden by the underlying functionality. This parameter should not be used to

Parameter	Description
	guarantee that the list will be of a certain size.
listType	Int: Define what is included in the list. 0=Files Only, 1=Folders Only or 2=Files and Folders (<i>1 and 2 are valid only for Complex Objects</i>).

Return Value

dwsr:DivaFilesAndFoldersResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.
filesAndFolders	DivaFilesAndFolders: Container for files and folders description.

dwsml:DivaFilesAndFolders

Parameter	Description
objectSummary	DivaObjectSummary: Information about the object details, such as the list of components, tape instances and other properties described in API call getObjectInfo .
isComplex	Boolean: True when this is a Complex Object. Available options are true , false , 1 , or 0 .
nextStartIndex	int: After the first (<i>and any subsequent</i>) call, the DIVArchive API libraries update this variable with the current position in the search. Use this value as the input parameter for subsequent calls.
siteName	This contains the site name of the Manager that satisfied the request.
fileAndFolderList	DivaFileFolderInfo: List of the files and folders of an object that have been partially restored. Each structure contains the Source Filename, a vector of the offsets used for the transfer, and a Destination Filename. This vector should be similar to the vector provided to the DIVA_partialRestoreObject() function in terms of files and offset pairs. This function is provided to eventually detect that the actual offsets used for the transfer to the Destination Server have been adapted based on the format of the data to transfer.
Options	String: Field for optional getFilesAndFolders parameters.

dwsm:DivaObjectSummary

Parameter	Description
objectCategory	String: Category used for archiving the Object.
objectName	String: Name of the Object.

dwsm:DivaFileFolderInfo

Parameter	Description
fileOrFolderName	String: The File or Folder Name.
isDirectory	Boolean: true if the component is a directory and not a file name.
sizeBytes	Long: The size of the file in bytes. Valid only for files.
fileId	Int: This is a unique ID for each file that is created by DIVArchive as part of the processing of this command.
totalNumFilesFolders	Int: The number of files and sub folders. Valid only for folders in a Complex Object.
totalSizeFilesFolders	Int: The total size of all files (including sub folders). Valid only for folders in a Complex Object.
checksums	dwsm:DivaFileChecksum

dwsm:DivaFileChecksum

Parameter	Description
checksumType	String: The type of the checksum, MD5, SHA1 etc.
checksumValue	String: The value of the checksum, in hexadecimal string format.
isGenuine	Boolean: True if this checksum was provided at the time of the archive and verified as Genuine.

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
<env:Body>
<xsd:getFilesAndFolders
  xmlns:xsd="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <xsd:sessionCode>2098cb00-41c5-40c3-9632-
    5f3267623b4b</xsd:sessionCode>
  <xsd:objectName>YAKARTA</xsd:objectName>
  <xsd:objectCategory>test_video</xsd:objectCategory>
  <xsd:startIndex>1</xsd:startIndex>
  <xsd:batchSize>10</xsd:batchSize>
  <xsd:listType>0</xsd:listType>
  <xsd:options/>
</xsd:getFilesAndFolders>
</env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Body>
<ns4:getFilesAndFoldersResponse
  xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <ns4:return
    xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:type="ns1:DivaFilesAndFoldersResponse">
    <ns1:divaStatus>1000</ns1:divaStatus>
    <ns1:divaFilesAndFolders>
      <objectSummary
        xmlns="http://model.api.ws.diva.fpdigital.com/xsd">
        <objectCategory>test_video</objectCategory>
        <objectName>YAKARTA</objectName>
      </objectSummary>
      <ns2:isComplex
        xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">false<
        /ns2:isComplex>
      <ns2:nextStartIndex
        xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">0</ns2:
        nextStartIndex>
      <ns2:siteName
        xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">local<
        /ns2:siteName>
      <fileAndFolderList
        xmlns="http://model.api.ws.diva.fpdigital.com/xsd">
        <checksums>
          <checksumType>MD5</checksumType>
          <checksumValue>5b1a20960848f0aea1eeb72b7b2ec33a</checksumV
            alue>
          <isGenuineChecksum>false</isGenuineChecksum>
        </checksums>
        <fileOrFolderName>YAKARTA.avi</fileOrFolderName>
```

```
        <isDirectory>false</isDirectory>
        <fileId>1</fileId>
        <sizeBytes>58688000</sizeBytes>
        <totalNumFilesFolders>0</totalNumFilesFolders>
        <totalSizeFilesFolders>0</totalSizeFilesFolders>
    </fileAndFolderList>
</ns1:divaFilesAndFolders>
</ns4:return>
</ns4:getFilesAndFoldersResponse>
</soapenv:Body>
</soapenv:Envelope>
```

2.11.19 *getGroupsList*

Synopsis

Gets a list of all Tape Groups defined within DIVArchive.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

Returns the descriptions for all of the groups.

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.

Return Value

dwsr:DivaGroupsListResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.
groups	List of DivaGroupDesc: List of Groups descriptions

dwsd:DivaGroupDesc

Parameter	Description
groupDesc	String: Description of a Group.
groupName	String: Name of a Group.

Possible `divaStatus` codes include:

Request-Specific Status Codes

Status Code	Name	Description
1009	<code>DIVA_ERR_OBJECT_DOESNT_EXIST</code>	The specified Object does not exist in the DIVArchive Database.
1010	<code>DIVA_ERR_SEVERAL_OBJECTS</code>	More than one Object with the specified name exists in the DIVArchive Database.
1031	<code>DIVA_ERR_OBJECT_IN_USE</code>	The Object is currently in use (<i>being Archived, Restored, Deleted, etc.</i>).

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:getGroupsList
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd"
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionCode</xs:sessionCode>
      </p:getGroupsList>
    </env:Body>
  </env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  <soapenv:Body>

  <ns4:getGroupsListResponse
    xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd"
    <ns4:return
      xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xsi:type="ns1:DivaGroupsListResponse">
        <ns1:divaStatus>divaStatus</ns1:divaStatus>
        <ns1:groups>
```

```

    <ns2:groupDesc
      xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">groupDesc
    1</ns2:groupDesc>

    <ns2:groupName
      xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">groupName
    1</ns2:groupName>
  </ns1:groups>

  <ns1:groups>

    <ns2:groupDesc
      xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">groupDesc
    2</ns2:groupDesc>

    <ns2:groupName
      xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">groupName
    2</ns2:groupName>
  </ns1:groups>
</ns4:return>
</ns4:getGroupsListResponse>
</soapenv:Body>
</soapenv:Envelope>

```

2.11.20 *getObjectDetailsList*

Synopsis

The `getObjectDetailsList` retrieves the list of Objects satisfying user-specified constraints with detailed information on each Object.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

The `DIVA_getObjectDetailsList` is an API call used to retrieve object information from the DIVArchive database. Only the latest state of the object is returned. Objects may be repeated across batches if the object is modified multiple times as the call advances (*in time*) from a user-specified time across objects in the DIVArchive database.

- The *created-since* call retrieves all objects created-since “some time”.
- The *deleted-since* call retrieves all objects deleted-since “some time”.
- If starting from a user-specified time of 0, the *modified-since* call retrieves all objects created since “some time”, and it is simply returning the state of the database from time 0.
- If starting from a user-specified time greater than 0, the call returns all objects created and deleted since “some time”, in addition to all objects with newly created and/or deleted instances.

Different levels of details may be specified (see *Level of Detail Setting Table* above). Level 0 would be the fastest, while Level 3 would return all possible details.

Note: Only the highest level of detail is supported. Using a lower level of detail will still return all information for objects.

The output may be structured by the Objects Lists or by Storage Tape. The output structure type is configured by setting the `ListType` parameter of the call.

The API client application should use the `DIVA_OBJECTS_LIST` setting in the following cases:

- To retrieve the list of objects (*Object Instances*) added to DIVArchive.
- To retrieve the list of objects (*Object Instances*) deleted from DIVArchive.
- To retrieve the combined list of all changes in DIVArchive Object Database (*adding and deleting objects, adding and deleting instances*).
- To continuously monitor the DIVArchive System to retrieve events of adding/deleting objects and adding/deleting instances.

The API Client application should use `DIVA_TAPE_INFO_LIST` setting in the following cases:

- To retrieve a list of Tape Instance information for added instances.
- To retrieve a list of Tape Instance information for deleted instances.

- To retrieve a list of Tape Instance information for repacked instances.
- To retrieve a list of Tape Instance information for ejected instances.
- To retrieve a list of Tape Instance information for inserted instances.

Note: If all objects are deleted, DIVA_TAPE_INFO_LIST will not return any results for deleted instances.

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

The `listPosition` points to the last object retrieved by the previous call of `getObjectDetailsList`.

Note: The next call to `getObjectDetailsList` must pass the `listPosition` attribute of the returned list to the `listPosition` parameter of `getObjectDetailsList`. The content of the `listPosition` attribute of the returned list must be passed into the new call without any changes to its content.

The first of successive calls to `getObjectDetailsList` must be identified by setting the `isFirstTime` parameter to `true` and initializing `initialTime` to the desired Search Start Time. Subsequent calls to `getObjectDetailsList` must be identified by setting the `isFirstTime` parameter to `false`. Be aware that Objects returned as a result may, in some circumstances, be duplicated in subsequent calls.

The **MODIFIED_SINCE** option may be used to retrieve all Objects modified since a certain time, including Objects with Instances that were created or deleted since the specified time.

The archiving date of created and modified objects should always be a non-negative number. However, the archiving date of deleted objects will always be -1.

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
isFirstTime	Boolean: True if this is the first in a set of repeated calls to <code>getObjectDetailsList</code> , otherwise this is False. Acceptable values are true/false or 1/0.
IntitalTime	Int: The start time of the list. Data will be collected and returned corresponding to this time and later. To retrieve all items in the database, use a time of zero (0).

Parameter	Description
listType	Int: listType is either <code>DIVA_OBJECTS_LIST</code> with value 1 or <code>DIVA_TAPE_INFO_LIST</code> with value 2 depending on what information is desired.
objectsListType	Int: Certain values for objectsListType can only be used with one of the two values for listType as shown. - Usable with <code>DIVA_OBJECTS_LIST = 1</code> <code>DIVA_OBJECTS_DELETED_SINCE = 1</code> <code>DIVA_OBJECTS_CREATED_SINCE = 2</code> <code>DIVA_OBJECTS_MODIFIED_SINCE = 3</code> - Usable with <code>DIVA_TAPE_INFO_LIST = 2</code> <code>DIVA_INSTANCE_CREATED = 1</code> <code>DIVA_INSTANCE_DELETED = 2</code> <code>DIVA_INSTANCE_REPACKED = 4</code> <code>DIVA_INSTANCE_EJECTED = 8</code> <code>DIVA_INSTANCE_INSERTED = 16</code>
listPosition	List of String: The elements of this list are for internal use only and need not be parsed by the client application. The application should insert the output of the previous call. When <code>isFirstTime</code> is true, a new empty list must be constructed and included. When <code>isFirstTime</code> is false, <code>listPosition</code> must be updated with the <code>listPosition</code> from the last response retrieved by the last call of <code>getObjectDetailsList</code>.
maxListSize	Int: The maximum number of elements to retrieve. NOTE: This is only a suggestion and may be overridden by the underlying functionality. This parameter should not be used to guarantee that the list will be a certain size.
objectName	String: The * wildcard can be used (e.g.: "Jules*Jim").
objectCategory	String: The * wildcard can be used (e.g.: "*video").
mediaName	String: The * wildcard can be used (e.g.: "soap*").
levelOfDetail	Int: One of the codes defined below: <pre> DIVA_OBJECTNAME_AND_CATEGORY = 0, DIVA_MISC = 1, DIVA_COMPONENT = 2, DIVA_INSTANCE = 3 </pre> Filtering by Object Name, Category, and Group is performed at all levels of detail.

Level of Detail Setting	Return Value
DIVA_OBJECTNAME_AND_CATEGORY (0)	<code>getObjectDetailsList</code> function will only return the Object Name and Category.
DIVA_MISC (1)	<code>getObjectDetailsList</code> function will return the size of the object, comments, archive date, and name and path on the source, in addition to all data returned with the DIVA_OBJECTNAME_AND_CATEGORY level of detail.
DIVA_COMPONENT (2)	<code>getObjectDetailsList</code> function will return the list of components value in addition to all data returned with the DIVA_MISC level of details.
DIVA_INSTANCE (3)	<code>getObjectDetailsList</code> function will return all instance information, repack state, and related active request information data, in addition to all data returned with the DIVA_COMPONENT level of detail.

Return Values

Depending upon the input parameters, the `getObjectDetailsList` function will return values as described in the table below:

List Type	Objects List Type	Supported Detail Level	Return Value
DIVA_OBJECTS_LIST	DIVA_OBJECTS_CREATED_SINCE	All	List Objects that have been created since a specified time.
	DIVA_OBJECTS_DELETED_SINCE	Only DIVA_OBJECTNAME_AND_CATEGORY	List Objects that have been deleted since a specified time.
	DIVA_OBJECTS_MODIFIED_SINCE	Only DIVA_INSTANCE	List Objects that have been created/deleted since a certain time, plus Objects with new or deleted instances. Note: If the list of instances is EMPTY, objects were DELETED. If the list of instances is NOT EMPTY, objects were CREATED or UPDATED.

List Type	Objects List Type	Supported Detail Level	Return Value
DIVA_TAPE_INFO_LIST	DIVA_INSTANCE_CREATED	Only DIVA_OBJECTNAME _AND_CATEGORY and DIVA_INSTANCE level.	List Objects and Tape information for all Tape Instances created since a specified time.
	DIVA_INSTANCE_DELETED	Only DIVA_OBJECTNAME _AND_CATEGORY and DIVA_INSTANCE level.	List Objects and Tape information for all Tape Instances deleted since a specified time.
	DIVA_INSTANCE_REPACKED	Only DIVA_OBJECTNAME _AND_CATEGORY and DIVA_INSTANCE level.	List Objects and Tape information for all Tape Instances repacked since a specified time.
DIVA_TAPE_INFO_LIST	DIVA_INSTANCE_EJECTED	Only DIVA_OBJECTNAME _AND_CATEGORY and DIVA_INSTANCE level.	List Objects and Tape information for all Tape Instances ejected since a specified time.
	DIVA_INSTANCE_INSERTED	Only DIVA_OBJECTNAME _AND_CATEGORY and DIVA_INSTANCE level.	List Objects and Tape information for all Tape Instances inserted since a specified time.

dwsr:DivaObjectDetailsListResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.
objectDetailsList	List of DivaObjectDetailsList: List of Groups descriptions

dwsm:DivaObjectDetailsList

Parameter	Description
listType	Int : listType is either DIVA_OBJECTS_LIST with value 1 or DIVA_TAPE_INFO_LIST with value 2 depending on what information is desired as shown below.
siteID	String : The DIVArchive System Name.
listPosition	List of String : The elements of this list are for internal use only and need not be parsed by the client application. Elements should serve as the input for the next call. After the first (<i>and any subsequent</i>) call, DIVArchiveWS API libraries update this variable with the current position in the search. This object must be provided as the input parameter to any subsequent calls.
objectInfos	List of DivaObjectInfo : For a list type of DIVA_OBJECTS_LIST = 1 , all of the Object and/or Instance information about the object details, such as the list of components, tape instances and other properties on Tapes and Disks. See DivaObjectInfo description.
objectTapeInfos	List of DivaObjectTapeInfo : For a list type of DIVA_TAPE_INFO_LIST = 2 , all of the Object information about the tapes containing instances of the object and other properties. See DivaObjectInfo description.

dwsm:DivaObjectInfo

Parameter	Description
actorInstances	List of DivaActorInstanceDesc : List of arrays of Disks where instances of this Object are stored. A list of Object Instances saved to disk.
archivingDate	Int : The date that this object was archived in seconds since 1970/01/01.
filesList	List of String : List of the files of the object
inserted	Boolean : True if the object is on a Tape that is currently inserted. Acceptable values are true/false or 1/0.
objectComments	String : Optional information describing the Object (<i>can be a null string</i>).

Parameter	Description
objectLockedStatus	Int: 0 if the object is unlocked.
objectSize	Long: Size in Kilobytes
objectSource	String: Location of the Object's Source DIVArchive System.
objectSummary	DivaObjectSummary: Basic information about the Object.
relatedRequests	List of Int: Non-terminated requests involving this object. A list of currently pending Request IDs that access this object.
rootDirectory	String: The root directory of the object files on objectSource .
tapeInstances	List of DivaTapeInstanceDesc: List of Tape Instances.
toBeRepacked	Boolean: True if the Object is to be repacked. Acceptable values are true/false OR 1/0 .
modifiedOrDeleted	Int: One of DIVA_MODIFIED_OR_DELETED • UNDEFINED = 0 – The levelOfDetail does not equal DIVA_INSTANCE. • DIVA_CREATED_OR_MODIFIED = 1 – The object was created or an instance was added or removed. • DIVA_DELETED = 2 – The object has been removed.

dwsn:DivaObjectTapeInfo

Parameter	Description
objectSummary	DivaObjectSummary: Basic information about the Object.
tapeInstanceInfo	List of DivaInstanceTapeInfo: Information about a Tape Instance.

dwsn:DivaActorInstanceDesc

Parameter	Description
actor	String: Name of the array of Disks where the instances are stored.
instanceID	Int: Instance's Identifier.

dwsml:DivaObjectSummary

Parameter	Description
objectCategory	String : Category used for archiving the Object.
objectName	String : Name of the Object.

dwsml:DivaTapeInstanceDesc

Parameter	Description
groupName	String : Name of the group containing the Tape.
inserted	Boolean : True if the Tape is currently inserted. Acceptable values are true/false OR 1/0 .
instanceID	Int : Instance's Identifier.
reqStatus	Int : Status of the request. Is the instance Required or Released? • DIVA_REQUIRED = 0 - Instance is requested to be inserted into the library. • DIVA_RELEASED = 1 - There is no need to have this instance present into the library.
tapeDesc	List of DivaTapeDesc : Descriptions of the Tapes.

dwsml:DivaInstanceTapeInfo

Parameter	Description
req	Int : Type of request
reqDate	Long : Date of the request
instanceID	Int : Instance's Identifier.
tapeDesc	List of DivaTapeDesc: Descriptions of the Tapes.

dwsn:DivaTapeDesc

Parameter	Description
externalizationComment	String: If the tape has been ejected from the library, this field may contain information to know where the tape has been stored.
goingToBeRepacked	Boolean: True if this tape is waiting to be Repacked. Acceptable values are true/false or 1/0 .
Inserted	Boolean: True if the Tape is currently inserted. Acceptable values are true/false or 1/0 .
Vsn	String: Volume Serial Number

Possible **divaStatus** codes include:

Request-Specific Status Codes

Status Code	Name	Description
1019	DIVA_WARN_NO_MORE_OBJECTS	The end of the list has been reached during the call (see <i>Description</i>).

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

2.11.20.1 Usage with DIVAnet Access Gateway

All filters are applied at an object level:

- If a user requests objects satisfying certain filter constraints, those constraints are applied to the object and not to individual instances of an object.
- If a user specifies an object name and category filter, the list will be filtered to contain only objects satisfying the specified object name and category.
- Media name is not defined at an object level, but rather at an instance level. A media name filter, will only allow objects with at least one instance satisfying the requested media name filter.

Note: If an instance of an object is created or deleted, and a user requests all modified objects with a particular media name, the object will be returned if and only if any instance of the object satisfies the media name filter.

Example:

A new instance of Object A was added at time 101. The instance that was added has a media name of CAR. Altogether Object A has two instances; one instance has a media name of TRUCK, the other has a media name of CAR.

An instance of Object B was removed at time 101. The instance that was removed had a media name of CAR. Altogether Object B has one instance.

A new instance of Object C was added at time 99. The instance that was added has a media name of TRAIN. Altogether Object C has two instances; one instance has a media name of TRAIN, the other has a media name of HANG GLIDE.

A user executes a `getObjectDetailsList` call with **MODIFIED SINCE TIME 100** with **MEDIA NAME FILTER = T***.

The only object that was modified since time 100 and has at least once instance with a media name that starts with T is Object A. The list returned by the `getObjectDetailsList` call in this case is *Object A*.

2.11.20.2 Usage and Recommended Practice

Multiple simultaneous calls to `getObjectDetailsList`, is supported, however since this call places a heavy demand on the database, simultaneous and/or frequent calls to this function should be avoided.

Sequence of Actions: It is recommended that the DIVArchive API client application adhere to the following sequence of actions:

1. Stores the object information returned by the call.
2. Set any `listPosition` value if `isFirstTime` is `true`. Otherwise, use **ALL**
3. `listPosition` values from the last `getObjectDetailsList` response.
4. Set the `IntitalTime` to the time at which the list is to start. Set this to zero (0) to include all objects in the database.

5. Set `isFirstTime` to `true` in order to indicate that this is the first call in a sequence of calls.
6. Set the `listType` and `objectsListType` to specify the type of call.

Example: Use `DIVA_OBJECTS_LIST` and `DIVA_OBJECTS_MODIFIED_SINCE` to indicate that you want object information for modified objects.

7. Set `maxListSize` to suggested number of objects you want returned by the call.
8. Set values of `objectName`, `objectCategory` and `mediaName` to build the filtered request.
9. Set the `levelOfDetail` value.
10. Call `getObjectDetailsList` with parameters mentioned above.
11. Use the data stored from Step 1 as needed by your application.
12. Copy the `listPosition` attribute of the call's output created in step 1 into the `listPosition` variable created in Step 2. Set `isFirstTime` to `FALSE`.
13. Repeat steps 8, 9, & 10 for as long as you need to monitor the DIVArchive System.

Continuous monitoring of DIVArchive requires a procedure similar to the one defined below in the *Continuous Updates Notification Design Pattern* section.

Duplication of Objects may occur across different return portions, so it is important to handle this case by examining the data returned by the call. In the case of a `MODIFIED_SINCE` call, it is important to compare the instances of the duplicate object returned by successive calls to see if new information about the object is available, and update your local repository accordingly.

An empty list may be returned as a valid result. This indicates that there were no changes to the system after the time specified in the last call. It is important to continue querying DIVArchive with the `getObjectDetailsList` call using the ID from the previous call. However, the frequency of the calls should be reduced once you receive an empty list to reduce the load on the DIVArchive Database.

The `getObjectDetailsList` function can effectively be used for the **Initial Database Synchronization** (in case the client application is maintaining a database) and for **Continuous Monitoring**. The same application can use the call for the purpose of the *Initial Database Synchronization*, and later it can be used for the purpose of *Continuous Monitoring* when the database is updated.

During the **Initial Database Synchronization** phase, the application should make frequent sequential calls to synchronize the local database with the DIVArchive Database. The application should call `getObjectDetailsList`, wait for a response, and then repeat the process.

After the Synchronization Phase, the application should go into the **Continuous Monitoring Phase**, where it should make periodic calls to update the system with the latest object information. If it is possible for the client application, it is recommended

that a call interval of *once per several minutes* be used. Continuous frequent execution of this call may impact the database heavily and degrade system performance.

A suggested list size of 500 is recommended for most applications. The amount of data retrieved by the `CREATED_SINCE` and `MODIFIED_SINCE` call is substantial (*object, instance and component data for each object*). **It is recommended that most applications use 500 as the maximum list size setting.**

2.11.20.3 Recommended Practices for Continuous Updates Notification Design Pattern (No Media Filter)

The *Design Pattern for Continuous Updates Notification* is used in multiple applications and is important in using the DIVArchive API. The client application may use the internal database with the goal of continuously updating the local database information with the changes in the DIVArchive Database. Following the design pattern can help to develop the performance-optimized Updates Notification Workflow.

The application should submit the call with the `objectsListType` set to `MODIFIED_SINCE` and set the level of detail required to collect instance-level information. In addition, the first time flag must be set to true and all necessary filter parameters must be set (*Object Name and Category*).

1. The application will receive a list of Objects and a new `listPosition`.
2. The next time, the application should execute the call with the `listPosition` obtained from Step 1 and the `isFirstTime` flag set to false. If the system is being used solely for synchronization purposes, then it is acceptable to submit another call immediately after receiving the list. Otherwise, it is recommended to wait for a period of time between calls to allow other DIVArchive requests to process.
3. Repeat Steps 1 and 2 for the course of execution to keep the internal database synchronized with DIVArchive Database.
4. If none of the objects in DIVArchive have been modified, then the list will be *EMPTY*, which means that there were no updates since the last call. The application should wait for a specific amount of time, and then retry again.
5. The application should check the list of instances:
 - a. If the value of `modifiedOrDeleted` in the `getObjectInfo` equals **DELETED**, objects were **DELETED** and the database should be updated.
 - b. If the value of `modifiedOrDeleted` in the `getObjectInfo` equals **CREATED_OR_MODIFIED**, the object was **CREATED** or **UPDATED**.
 - i. If the Object existed in the database previously, the database should be updated with the list of instances.
 - ii. If the Object does not exist in the database, it should be added to the database.

REST Request Structures

The code below is the **REST Request Structure** for the **Initial Request**. Note that **isFirstTime** is set to **true**:

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
<env:Body>
<p:getObjectDetailsList
xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <xs:sessionCode
    xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
    ode</xs:sessionCode>
    <xs:isFirstTime
      xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">true</xs
      :isFirstTime>
    <xs:initialTime
      xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">initialT
      ime</xs:initialTime>
    <xs:listType
      xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">listType
    </xs:listType>
    <xs:objectsListType
      xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectsL
      istType</xs:objectsListType>
    <xs:listPosition
      xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">0</xs:li
      stPosition>
    <xs:maxListSize
      xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">maxListS
      ize</xs:maxListSize>
    <xs:objectName
      xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectNa
      me</xs:objectName>
    <xs:objectCategory
      xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectCa
      tegory</xs:objectCategory>
    <xs:mediaName
      xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">mediaNam
      e</xs:mediaName>
    <xs:levelOfDetail
      xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">levelOfD
      etail</xs:levelOfDetail>
  </p:getObjectDetailsList>
</env:Body>
</env:Envelope>
```

All **Subsequent REST Requests** use the following code. Note that **isFirstTime** is now set to **false**:

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
<env:Body>
<p:getObjectDetailsList
xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <xs:sessionCode
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
ode</xs:sessionCode>
  <xs:isFirstTime
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">false</xs:isFirstTime>
  <xs:initialTime
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">initialT
ime</xs:initialTime>
  <xs:listType
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">listType
</xs:listType>
  <xs:objectsListType
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectsL
istType</xs:objectsListType>
  <xs:listPosition
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">listPosi
tion1</xs:listPosition>
  <xs:listPosition
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">listPosi
tion2</xs:listPosition>
  <xs:listPosition
  ...
  <xs:listPosition
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">listPosi
tion_LastValue</xs:listPosition>
  <xs:maxListSize
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">maxListS
ize</xs:maxListSize>
  <xs:objectName
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectNa
me</xs:objectName>
  <xs:objectCategory
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectCa
tegory</xs:objectCategory>
  <xs:mediaName
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">mediaNam
e</xs:mediaName>
  <xs:levelOfDetail
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">levelOfD
etail</xs:levelOfDetail>
</p:getObjectDetailsList>
</env:Body>
</env:Envelope>
```

REST Response Structures

The following code represents a **General Response Structure** that is received from both the **Initial Request** and **Subsequent Requests**:

```
<?xml version='1.0' encoding='UTF-8'?>

<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">

<soapenv:Body>

<ns4:getObjectDetailsListResponse
xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <ns4:return
xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="ns1:DivaObjectDetailsListResponse">
    <ns1:divaStatus>divaStatus</ns1:divaStatus>
    <ns1:objectDetailsList>
      <ns2:listType
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">listType<
/ns2:listType>
      <ns2:siteID
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">siteID</n
s2:siteID>
      <ns2:listPosition
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">listPosit
ion1</ns2:listPosition>
      <ns2:listPosition
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">listPosit
ion2</ns2:listPosition>
      ...
      <ns2:listPosition
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">listPosit
ion_LastValue</ns2:listPosition>
    <objectInfos xmlns="http://model.api.ws.diva.fpdigital.com/xsd">
      <actorInstances xsi:nil="1"/>
      <archivingDate>archivingDate</archivingDate>
      <filesList>filesList</filesList>
      <inserted>inserted</inserted>
      <objectComments>objectComments</objectComments>
      <objectLockedStatus>objectLockedStatus</objectLockedStatus>
      <objectSize>objectSize</objectSize>
      <objectSource>objectSource</objectSource>
      <objectSummary>
        <objectCategory>objectCategory</objectCategory>
        <objectName>objectName</objectName>
      </objectSummary>
      <relatedRequests xsi:nil="1"/>
      <rootDirectory>rootDirectory</rootDirectory>
      <tapeInstances>
        <groupName>groupName</groupName>
        <inserted>inserted</inserted>
        <instanceID>instanceID</instanceID>
        <reqStatus>reqStatus</reqStatus>
        <tapeDesc>
          <externalizationComment/>
        </tapeDesc>
      </tapeInstances>
    </objectInfos>
  </ns1:objectDetailsList>
</ns4:return>
</ns4:getObjectDetailsListResponse>
</soapenv:Body>
</soapenv:Envelope>
```

```

        <goingToBeRepacked>goingToBeRepacked</goingToBeRepacked>
        <inserted>inserted</inserted>
        <vsn>vsn</vsn>
    </tapeDesc>
</tapeInstances>
    <toBeRepacked>toBeRepacked</toBeRepacked>
</objectInfos>
<ns2:objectTapeInfos
    xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd"
    xsi:nil="1"/>
</ns1:objectDetailsList>
</ns4:return>
</ns4:getObjectDetailsListResponse>
</soapenv:Body>
</soapenv:Envelope>

```

The following code represents how the `<objectInfos>` portions of the code above looks depending upon the value of the `listType` and `levelOfDetail` parameters:

- `listType = 1`
- `levelOfDetail = 0`

```

<objectInfos xmlns="http://model.api.ws.diva.fpdigital.com/xsd">
    <actorInstances xsi:nil="1"/>
    <archivingDate>archivingDate</archivingDate>
    <filesList xsi:nil="1"/>
    <inserted>false</inserted>
    <objectComments xsi:nil="1"/>
    <objectLockedStatus>objectLockedStatus</objectLockedStatus>
    <objectSize>objectSize</objectSize>
    <objectSource xsi:nil="1"/>
    <objectSummary>
        <objectCategory>objectCategory</objectCategory>
        <objectName>objectName</objectName>
    </objectSummary>
    <relatedRequests xsi:nil="1"/>
    <rootDirectory xsi:nil="1"/>
    <tapeInstances xsi:nil="1"/>
    <toBeRepacked>toBeRepacked</toBeRepacked>
</objectInfos>

```

- `listType = 1`
- `levelOfDetail = 1`

```

<objectInfos xmlns="http://model.api.ws.diva.fpdigital.com/xsd">
    <actorInstances xsi:nil="1"/>
    <archivingDate>archivingDate</archivingDate>
    <filesList xsi:nil="1"/>
    <inserted>inserted</inserted>
    <objectComments/>
    <objectLockedStatus>objectLockedStatus</objectLockedStatus>

```

```

<objectSize>objectSize</objectSize>
<objectSource>objectSource</objectSource>
<objectSummary>
  <objectCategory>objectCategory</objectCategory>
  <objectName>objectName</objectName>
</objectSummary>
<relatedRequests xsi:nil="1"/>
<rootDirectory>rootDirectory</rootDirectory>
<tapeInstances xsi:nil="1"/>
<toBeRepacked>toBeRepacked</toBeRepacked>
</objectInfos>

```

- listType = 1
- levelOfDetail = 2

```

<objectInfos xmlns="http://model.api.ws.diva.fpdigital.com/xsd">
  <actorInstances xsi:nil="1"/>
  <archivingDate>archivingDate</archivingDate>
  <filesList>filesList</filesList>
  <inserted>inserted</inserted>
  <objectComments/>
  <objectLockedStatus>objectLockedStatus</objectLockedStatus>
  <objectSize>objectSize</objectSize>
  <objectSource>objectSource</objectSource>
  <objectSummary>
    <objectCategory>objectCategory</objectCategory>
    <objectName>objectName</objectName>
  </objectSummary>
  <relatedRequests xsi:nil="1"/>
  <rootDirectory>rootDirectory</rootDirectory>
  <tapeInstances xsi:nil="1"/>
  <toBeRepacked>toBeRepacked</toBeRepacked>
</objectInfos>

```

- listType = 1
- levelOfDetail = 3

```

<objectInfos xmlns="http://model.api.ws.diva.fpdigital.com/xsd">
  <actorInstances>
    <actor>actor</actor>
    <instanceID>instanceID</instanceID>
  </actorInstances>
  <archivingDate>archivingDate</archivingDate>
  <filesList>filesList</filesList>
  <inserted>inserted</inserted>
  <objectComments/>
  <objectLockedStatus>objectLockedStatus</objectLockedStatus>
  <objectSize>objectSize</objectSize>
  <objectSource>objectSource</objectSource>
  <objectSummary>
    <objectCategory>objectCategory</objectCategory>
    <objectName>objectName</objectName>
  </objectSummary>

```

```

<relatedRequests xsi:nil="1"/>
<rootDirectory>rootDirectory</rootDirectory>
<tapeInstances>
  <groupName>groupName</groupName>
  <inserted>inserted</inserted>
  <instanceID>instanceID</instanceID>
  <reqStatus>reqStatus</reqStatus>
  <tapeDesc>
    <externalizationComment/>
    <goingToBeRepacked>goingToBeRepacked</goingToBeRepacked>
    <inserted>inserted</inserted>
    <vsn>vsn</vsn>
  </tapeDesc>
</tapeInstances>
<toBeRepacked>toBeRepackedv</toBeRepacked>
</objectInfos>

```

- listType = 2
- levelOfDetail = 0-3

```

<objectTapeInfos xmlns="http://model.api.ws.diva.fpdigital.com/xsd">
  <objectSummary>
    <objectCategory>objectCategory</objectCategory>
    <objectName>objectName</objectName>
  </objectSummary>
  <tapeInstanceInfo>
    <req>req</req>
    <reqDate>reqDate</reqDate>
    <instanceID>instanceID</instanceID>
    <tapeDesc>
      <externalizationComment/>
      <goingToBeRepacked>goingToBeRepacked</goingToBeRepacked>
      <inserted>inserted</inserted>
      <vsn>vsn</vsn>
    </tapeDesc>
  </tapeInstanceInfo>
  <tapeInstanceInfo>
    <req>req</req>
    <reqDate>reqDate</reqDate>
    <instanceID>instanceID</instanceID>
    <tapeDesc>
      <externalizationComment/>
      <goingToBeRepacked>goingToBeRepacked</goingToBeRepacked>
      <inserted>inserted</inserted>
      <vsn>vsn</vsn>
    </tapeDesc>
  </tapeInstanceInfo>
</objectTapeInfos>

```

2.11.21 getObjectInfo

Synopsis

Returns information about a particular Object of the DIVArchive System.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Note: The `actorInstances` parameter is kept unchanged for compatibility although it is formally a list of Disk Instances and not Actor Instance.

For compatibility reasons, the class `dws:DivActorInstanceDesc` designates a Disk Instance (*not an Actor Instance*) and its string `actor` field now contains the Array Name instead of an Actor Name.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

`dws:getObjectInfo`

Parameter	Description
<code>sessionCode</code>	String: Unique ID associated with the client's session.
<code>objectName</code>	String: Name of the object to be queried.
<code>objectCategory</code>	String: Category assigned to the Object when it was archived. This parameter can be a null string (<i>this may result in an error if several objects have the same name</i>).

Return Value

`dws:DivObjectInfoResponse`

Parameter	Description
<code>divaStatus</code>	Int: One of these <code>DIVA_STATUS</code> constants. Refer to Appendix A3 DIVArchive WS Status Codes.
<code>info</code>	DivObjectInfo: Container of object information description.

dwsm:DivaObjectInfo

Parameter	Description
actorInstances	List of DivaActorInstanceDesc : List of arrays of Disks where instances of this Object are stored. A list of Object Instances saved to disk.
archivingDate	Int : The date that this object was archived in seconds since 1970/01/01.
filesList	List of String : List of the files of the object
inserted	Boolean : True if the object is on a Tape that is currently inserted. Acceptable values are true/false or 1/0.
objectComments	String : Optional information describing the Object (<i>can be a null string</i>).
objectLockedStatus	Int : 0 if the object is unlocked.
objectSize	Long : Size in Kilobytes
objectSource	String : Location of the Object's Source DIVArchive System.
objectSummary	DivaObjectSummary : Basic information about the Object.
relatedRequests	List of Int : Non-terminated requests involving this object. A list of currently pending Request IDs that access this object.
rootDirectory	String : The root directory of the object files on objectSource .
tapeInstances	List of DivaTapeInstanceDesc : List of Tape Instances.
toBeRepacked	Boolean : True if the Object is to be repacked. Acceptable values are true/false OR 1/0.
modifiedOrDeleted	Int : One of DIVA_MODIFIED_OR_DELETED • UNDEFINED = 0 - The levelOfDetail does not equal DIVA_INSTANCE. • DIVA_CREATED_OR_MODIFIED = 1 – The object was created or an instance was added or removed. • DIVA_DELETED = 2 – The object has been removed.

dwsm:DivaActorInstanceDesc

Parameter	Description
actor	String : Name of the array of Disks where the instances are stored.
instanceID	Int : Instance's Identifier.

dwsm:DivaObjectSummary

Parameter	Description
objectCategory	String : Category that the Object was archived with.
objectName	String : Name of the Object.

dwsm:DivaTapeInstanceDesc

Parameter	Description
groupName	String : Name of the group containing the Tape.
inserted	Boolean : True if the Tape is currently inserted. Acceptable values are true/false Or 1/0 .
instanceID	Int : Instance's Identifier.
reqStatus	Int : Status of the request. Is the instance Required or Released? • DIVA_REQUIRED = 0 - Instance is requested to be inserted into the library. • DIVA_RELEASED = 1 - There is no need to have this instance present into the library.
tapeDesc	List of DivaTapeDesc : Descriptions of the Tapes.

dwsm:DivaTapeDesc

Parameter	Description
externalizationComment	String : If the tape has been ejected from the library, this field may contain information to know where the tape has been stored.
goingToBeRepacked	Boolean : True if this tape is waiting to be Repacked. Available options are true, false, 1, or 0 .
Inserted	Boolean : True if the Tape is currently inserted. Available options are true, false, 1, or 0 .
Vsn	String : Volume Serial Number

Possible `divaStatus` codes include:

Request-Specific Status Codes

Status Code	Name	Description
1009	<code>DIVA_ERR_OBJECT_DOESNT_EXIST</code>	The specified Object does not exist in the DIVArchive Database.
1010	<code>DIVA_ERR_SEVERAL_OBJECTS</code>	More than one Object with the specified name exists in the DIVArchive Database.

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

See also: `archiveObject`, `restoreObject`, and `deleteObject`

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:getObjectInfo
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionCode</xs:sessionCode>
      <xs:objectName
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectName</xs:objectName>
      <xs:objectCategory
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectCategory</xs:objectCategory>
    </p:getObjectInfo>
  </env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>

<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <ns4:getObjectInfoResponse
xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <ns4:return
xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="ns1:DivaObjectInfoResponse">
        <ns1:divaStatus>divaStatus</ns1:divaStatus>
        <ns1:info>
          <ns2:actorInstances xsi:nil="1"
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd" />
          <ns2:archivingDate
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">archiving
Date</ns2:archivingDate>
          <ns2:filesList
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">fileList<
/ns2:filesList>
          <ns2:inserted
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">inserted<
/ns2:inserted>
          <ns2:objectComments
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">objectCom
ments</ns2:objectComments>
          <ns2:objectLockedStatus
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">objectLoc
kedStatus</ns2:objectLockedStatus>
          <ns2:objectSize
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">objectSiz
e</ns2:objectSize>
          <ns2:objectSource
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">objectSou
rce</ns2:objectSource>
          <objectSummary
xmlns="http://model.api.ws.diva.fpdigital.com/xsd">
            <objectCategory>objectCategory</objectCategory>
            <objectName>objectName</objectName>
          </objectSummary>
          <ns2:relatedRequests xsi:nil="1"
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd" />
```

```

<ns2:rootDirectory
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">rootDirec
tory</ns2:rootDirectory>

<tapeInstances
xmlns="http://model.api.ws.diva.fpdigital.com/xsd">
  <groupName>groupName</groupName>
  <inserted>inserted</inserted>
  <instanceID>instanceID</instanceID>
  <reqStatus>reqStatus</reqStatus>
  <tapeDesc>
    <externalizationComment/>
    <goingToBeRepacked>goingToBeRepacked</goingToBeRepacked>
    <inserted>inserted</inserted>
    <vsu>vsu</vsu>
  </tapeDesc>
</tapeInstances>

<ns2:toBeRepacked
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">toBeRepac
ked</ns2:toBeRepacked>
</ns1:info>
</ns4:return>
</ns4:getObjectInfoResponse>
</soapenv:Body>
</soapenv:Envelope>

```

2.11.22 *getPartialRestoreRequestInfo*

Synopsis

Depending on the format of the material to transfer, DIVArchive may compute and use other offsets than those provided to the `PartialRestoreObject`. `getPartialRestoreRequestInfo` is provided to get these offsets.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Note: This function should be called only once the Partial File Restore Request is completed.

Description

When processing the request `DIVA_PartialRestoreObject()`, and the format for the offsets was specified as timecodes, the offsets that were actually used may differ somewhat from what was specified in the request. Once the Partial File Restore Request is complete, this command may be used to obtain the actual offsets of the restored files

This is a special purpose command that is valid only as follows:

1. The request number to be queried must be a Partial File Restore Request that has been **successfully** completed.
2. The format specified in the Partial File Restore Request must be a timecode type. This command is therefore not valid when the format of the request was Folder Based or DPX.

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

dwsi:getPartialRestoreRequestInfo

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
requestNumber	Long: Identifies the completed Partial File Restore Request to be queried.

Return Value

dwsr:DivaPartialRestoreRequestInfoResponse

Parameter	Description
divaStatus	Int: One of these <code>DIVA_STATUS</code> constants. Refer to Appendix A3 DIVArchive WS Status Codes.
fileList	List of DivaOffsetSourceDest: List of files of the Object that have been partially restored. Each structure contains the Source File Name, a vector of the offsets used for the transfer, and a Destination File Name. This vector should be similar to the vector provided to the <code>partialRestoreObject</code> function in terms of files and offset pairs. This function is provided to eventually detect that actual offsets used for the transfer to the Destination Server have been adapted based on the format of the material to transfer.

dwsd:DivaOffsetSourceDest

Parameter	Description
destFile	String: Destination File that the Files were copied to.
offsetVector	A file to be partially restored with offset pairs.
sourceFile	String: Source files that were copied.

dwsd:DivaOffsetPair

Parameter	Description
byteBegin	Long: start position of byte offset from the beginning of the file. <code>OFFSET_FORMAT_BYTE = 0.</code>
byteEnd	Long: finish position of byte offset from the beginning of the file. <code>OFFSET_FORMAT_BYTE = 0.</code>

Parameter	Description
timeCodeBegin	String: Time where the file begins for use with <code>OFFSET_FORMAT_TIMECODE = 1</code>. Time codes are expressed as strings in HH:MM:SS:FF format: • HH = hours (<i>from 00 to 31</i>) • MM = minutes (<i>from 00 to 59</i>) • SS = seconds (<i>from 00 to 59</i>) • FF = Frames (<i>from 00 to 99</i>) • Minimum value is "00:00:00:00". • Maximum value is "99:99:99:99".
timeCodeEnd	String: Time where the file ends for use with <code>OFFSET_FORMAT_TIMECODE = 1</code>. Time codes are expressed as strings in HH:MM:SS:FF format: • HH = hours (<i>from 00 to 31</i>) • MM = minutes (<i>from 00 to 59</i>) • SS = seconds (<i>from 00 to 59</i>) • FF = Frames (<i>from 00 to 99</i>) • Minimum value is "00:00:00:00". • Maximum value is "99:99:99:99".
posType	Int: Type of offset. Either <code>OFFSET_FORMAT_BYTE = 0</code> or <code>OFFSET_FORMAT_TIMECODE = 1</code>. Time codes are expressed as strings in HH:MM:SS:FF format: • HH = hours (<i>from 00 to 31</i>) • MM = minutes (<i>from 00 to 59</i>) • SS = seconds (<i>from 00 to 59</i>) • FF = Frames (<i>from 00 to 99</i>) • Minimum value is "00:00:00:00". • Maximum value is "99:99:99:99".

Possible `divaStatus` codes include:

Request-Specific Status Codes

Status Code	Name	Description
1008	<code>DIVA_ERR_INVALID_PARAMETER</code>	<code>requestNumber</code> identifies no completed Partial File Restore Request.
1011	<code>DIVA_ERR_NO_SUCH_REQUEST</code>	<code>requestNumber</code> identifies no Request.

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

See also: `partialRestore` and `getRequestInfo`

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:getPartialRestoreRequestInfo
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
        ode</xs:sessionCode>
      <xs:requestNumber
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">requestN
        umber</xs:requestNumber>
    </p:getPartialRestoreRequestInfo>
  </env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <ns4:getPartialRestoreRequestInfoResponse
      xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <ns4:return
        xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:type="ns1:DivaPartialRestoreRequestInfoResponse">
```

```

<ns1:divaStatus>divaStatus</ns1:divaStatus>
<ns1:fileList>
  <ns2:destFile
    xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">destFile<
    /ns2:destFile>
  <offsetVector
    xmlns="http://model.api.ws.diva.fpdigital.com/xsd">
    <byteBegin>byteBegin</byteBegin>
    <byteEnd>byteEnd</byteEnd>
    <timeCodeBegin xsi:nil="1"/>
    <timeCodeEnd xsi:nil="1"/>
    <postType>postType</postType>
  </offsetVector>
  <ns2:sourceFile
    xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">sourceFile
  </ns2:sourceFile>
</ns1:fileList>
</ns4:return>
</ns4:getPartialRestoreRequestInfoResponse>
</soapenv:Body>
</soapenv:Envelope>

```

2.11.23 *getRequestInfo*

Synopsis

Obtains information about an Archive, Restore, Delete or Repack request.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

dws:getRequestInfo

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
requestNumber	Int: Identifies the Request to be queried.

Return Value

dwsr:DivaRequestInfoResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.
divaRequestInfo	DivaRequestInfo: Container for request information.

dws:DivaRequestInfo

Parameter	Description
abortionReason	DivaAbortionReason: Information about why the Request was aborted, if it was. Note: No Error is displayed when the request completes successfully.

Parameter	Description
additionalInfo	String: See 2.10.22.1 below for more information on the use of this field
currentPriority	Int: Level of priority for this Request. The <code>priorityLevel</code> can be in the range [0...100] or the value <code>DIVA_DEFAULT_REQUEST_PRIORITY</code>. The value 0 is the lowest priority and 100 the highest. There are five predefined values: • <code>DIVA_REQUEST_PRIORITY_MIN = 0</code> • <code>DIVA_REQUEST_PRIORITY_LOW = 25</code> • <code>DIVA_REQUEST_PRIORITY_NORMAL = 50</code> • <code>DIVA_REQUEST_PRIORITY_HIGH = 75</code> • <code>DIVA_REQUEST_PRIORITY_MAX = 100</code> Using the <code>DIVA_DEFAULT_REQUEST_PRIORITY = -1</code> value, the DIVArchive WS uses the default priority for this request (<i>default request priority is defined in the DIVArchive WS configuration</i>). Using another value (<i>out of the range [0...100] or predefined values</i>) yields a <code>DIVA_ERR_INVALID_PARAMETER</code> error.
objectSummary	DivaObjectSummary: Basic information about the Object.
progress	Int: From 0 to 100 (%) if <code>requestState</code> is <code>DIVA_RUNNING</code> .
repackTapes	DivaRepackTapesInfo: Container for information about Tape Repacking.
requestNumber	Long: Request number of the queried request.
requestState	Int: Integer value corresponding to the current state of the queried request. • <code>DIVA_COMPLETED = 3</code> • <code>DIVA_ABORTED = 4</code> • <code>DIVA_CANCELLED = 5</code> • <code>DIVA_UNKNOWN_STATE = 6</code> • <code>DIVA_PARTIALLY_ABORTED = 11</code> • <code>DIVA_RUNNING = 12</code>

Parameter	Description
requestType	Int: Integer value corresponding to the type of request queried request. • DIVA_ARCHIVE_REQUEST = 0 • DIVA_RESTORE_REQUEST = 1 • DIVA_DELETE_REQUEST = 2 • DIVA_EJECT_REQUEST = 3 • DIVA_INSERT_REQUEST = 4 • DIVA_COPY_REQUEST = 5 • DIVA_COPY_TO_NEW_REQUEST = 6 • DIVA_RESTORE_INSTANCE_REQUEST = 7 • DIVA_DELETE_INSTANCE_REQUEST = 8 • DIVA_UNKNOW_REQUEST_TYPE = 9 • DIVA_AUTOMATIC_REPACK_REQUEST = 10 • DIVA_ONDEMAND_RAPACK_REQUEST = 11 • DIVA_ASSOC_COPY_REQUEST = 12 • DIVA_PARTIAL_RESTORE_REQUEST = 13 • DIVA_MULTIPLE_RESTORE_REQUEST = 14 • DIVA_TRANSCODE_ARCHIVED_REQUEST = 15 • DIVA_EXPORT_REQUEST = 16 • DIVA_TRANSFER_REQUEST = 17 • DIVA_AUTOMATIC_VERIFY_TAPES_REQUEST = 18 • DIVA_MANUAL_VERIFY_TAPES_REQUEST = 19

Parameter	Description
description	String: If the request was aborted then this is an integer value corresponding to the reason why the queried request was aborted. If the request was not aborted then abortionReason will be DIVA_AR_NONE = 0. • DIVA_AR_NONE = 0 ○ Request not aborted • DIVA_AR_DRIVE = 1 ○ Drive troubles • DIVA_AR_TAPE = 2 ○ Tape troubles • DIVA_AR_ACTOR = 3 ○ Actor troubles • DIVA_AR_DISK = 4 ○ Disk troubles • DIVA_AR_DISK_FULL = 5 ○ Disk is full • DIVA_AR_SOURCE_DEST = 6 ○ Source/destination troubles • DIVA_AR_RESOURCES = 7 ○ Resources attribution troubles • DIVA_AR_LIBRARY = 8 ○ Library troubles • DIVA_AR_PARAMETERS = 9 ○ Wrong request parameters • DIVA_AR_UNKNOWN = 10 ○ Unknown code • DIVA_AR_INTERNAL = 11 ○ Internal DIVArchive WS error
description	String: More detailed information on why the Request was aborted.

dwsml:DivaObjectSummary

Parameter	Description
objectCategory	String : Category that the Object was archived with.
objectName	String : Name of the Object.

dwsml:DivaRepackTapesInfo

Parameter	Description
destinationTape	String : Tape to Repack data to.
sourceTape	String : Tape to Repack data from.

Possible **divaStatus** codes include:

Request-Specific Status Codes

Status Code	Name	Description
1011	DIVA_ERR_NO_SUCH_REQUEST	requestNumber identifies no Request.

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

REST Structure

The **getRequestInfo** command is included in all REST Responses for all requests and commands and is used as an added check for request validity. The request is called first and then the **getRequestInfo** is called following the actual Command Request.

The response structure is similar to the following and will be included in the Request Response:

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:getRequestInfo
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionCode
      </xs:sessionCode>
    </p:getRequestInfo>
  </env:Body>
</env:Envelope>
```

```

    <xs:requestNumber
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">requestNum
ber</xs:requestNumber>
</p:getRequestInfo>
</env:Body>
</env:Envelope>

```

REST Response Structure

```

<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Body>
<ns4:getRequestInfoResponse
xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
    <ns4:return
xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="ns1:DivaRequestInfoResponse">
        <ns1:divaStatus>divaStatus</ns1:divaStatus>
        <ns1:divaRequestInfo>
            <abortionReason
xmlns="http://model.api.ws.diva.fpdigital.com/xsd">
                <code>code</code>
                <description>description</description>
            </abortionReason>
            <ns2:additionalInfo
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">additiona
lInfo</ns2:additionalInfo>
            <ns2:currentPriority
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">currentPr
iority</ns2:currentPriority>
            <objectSummary
xmlns="http://model.api.ws.diva.fpdigital.com/xsd">
                <objectCategory>objectCategory</objectCategory>
                <objectName>objectName</objectName>
            </objectSummary>
            <ns2:progress
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">progress<
/ns2:progress>
            <repackTapes xmlns="http://model.api.ws.diva.fpdigital.com/xsd">
                <destinationTape>destinationTape</destinationTape>
                <sourceTape/>

```

```

</repackTapes>

<ns2:requestNumber
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">requestNu
mber</ns2:requestNumber>

<ns2:requestState
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">requestSt
ate</ns2:requestState>

<ns2:requestType
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">requestTy
pe</ns2:requestType>

</ns1:divaRequestInfo>

</ns4:return>

</ns4:getRequestInfoResponse>

</soapenv:Body>

</soapenv:Envelope>

```

2.11.23.1 additionalInfo

The `additionalInfo` field of the `dwsM:DivRequestInfo` structure may contain one or more of the following, depending upon the request type.

Note: The `additionalInfo` will come back escaped and requires decoding and parsing.

MOB ID:

MOB ID is a unique object identifier generated and used by AVID software. The DIVArchive API provides the interface to retrieve the **MOB ID** for Third Party vendors after restoring archived Objects to Unity. The **MOB ID** is available in the `additionalInfo` field of the `divaRequestInfo` structure. One can retrieve the **MOB ID** only when the Object is restored to the AVID Unity system.

MOB ID Sample:

060c2b34020511010104100013-000000-002e0815d552002b-060e2b347f7f-2a80

XML Document:

Depending upon the type of request, the **XML** document may be empty, or it may contain any combination of the following elements. See the schema `additionalInfoRequestInfo.xsd` found in the `program\Common\schemas` directory of the DIVArchive installation.

When the Request was a Restore, N-Restore, Partial File Restore, Copy, or Copy To New.

The list of media that contains the requested object is provided.

```
<ADDITIONAL_INFO
  xmlns="http://www.fpdigital.com/divarchive/additionalInfoRequestInfo/v
  1.0">
  <Object>
    <Name>Name</Name>
    <Category>Category</Category>
    <Instances>
      <DiskInstance>
        <Id>Id</Id>
        <Disk>
          <MediaName>MediaName</MediaName>
        </Disk>
      </DiskInstance>
```

```

    <TapeInstance>
      <Id>Id</Id>
      <Tape>
        <MediaName>MediaName - Barcode</MediaName>
      </Tape>
    </TapeInstance>
  </Instances>
</Object>
</ADDITIONAL_INFO>

```

The following is included when the Request was a Multiple Restore.

If the restore is **OK** for one of the Destinations, but **NOT OK** for another, the Request State Parameter is `DIVA_PARTIALLY_ABORTED` and the Request Abortion Code is `DIVA_AR_SOURCE_DEST`. The status of each Destination is as follows:

```

<ADDITIONAL_INFO
  xmlns="http://www.fpdigital.com/divarchive/additionalInfoRequestInfo/v1.0">
  <request id="12345" type="Restore">
    <destination name="destination name one" success="true"/>
    <destination name="destination name two" success="false"/>
  </request>
</ADDITIONAL_INFO>

```

The Clip ID is included when the Request was for a Restore to a Quantel device.

An ISA gateway never overwrites clips. A new Clip ID is created for every imported clip. The `clipID` of the created clip will be supplied at the end of the Transfer Complete message.

226 Transfer Complete. [new ClipID]

Actor captures this new `clipID` at the end of the transfer and forwards it to the DIVArchive WS. In order to get it using the DIVArchive API, `getRequestInfo` must be called. If the Request is completed the new `clipID` will be in the Additional Request Information field as shown here:

```

<ADDITIONAL_INFO
  xmlns="http://www.fpdigital.com/divarchive/additionalInfoRequestInfo/v1.0">
  <ClipID>ClipID</ClipID>
</ADDITIONAL_INFO>

```

2.11.24 *getSourceDestinationList*

Synopsis

The purpose of this function is to provide list of Source Servers present in a particular DIVArchive System.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

dwsr:getSourceDestinationList

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
options	String: No options have been defined for this command, may be empty or null.

Return Value

dwsr:DivaSourceDestinationListResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.
arraysInfo	DivaSourceDestinationList: List of arrays information.

dwsM:DivasourceDestinationList

Parameter	Description
serversAddress	String: Server IP Address.
serversConnectOption	String: Server connection Options.
serversMaxAccess	Int: Maximum number of accesses to the server.
serversMaxReadAccess	Int: Maximum number of read accesses to server.
serversMaxThroughput	Long: Server maximum throughput.
serversMaxWriteAccess	Int: Server maximum write access.
serversName	String: Server Name.
serversProductionSystem	String: Production System Name.
serversRootPath	String: Server Root Path.
serversSourceType	String: Server Name (<i>FTP, CIFS, AVID, etc.</i>)

Possible **divaStatus** codes include:

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
<env:Body>
<p:getSourceDestinationList
xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <xs:sessionCode
    xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
    ode</xs:sessionCode>
  <xs:options
    xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">options<
    /xs:options>
</p:getSourceDestinationList>
</env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>

<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <ns4:getSourceDestinationListResponse
xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <ns4:return
xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="ns1:DivaSourceDestinationListResponse">
        <ns1:divaStatus>1000</ns1:divaStatus>
        <ns1:arraysInfo>
          <ns2:serversAddress
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">serversAd
dress</ns2:serversAddress>
          <ns2:serversConnectOption
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">serversCo
nnectOption</ns2:serversConnectOption>
          <ns2:serversMaxAccess
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">serversMa
xAccess</ns2:serversMaxAccess>
          <ns2:serversMaxReadAccess
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">serversMa
xReadAccess</ns2:serversMaxReadAccess>
          <ns2:serversMaxThroughput
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">serversMa
xThroughput</ns2:serversMaxThroughput>
          <ns2:serversMaxWriteAccess
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">serversMa
xWriteAccess</ns2:serversMaxWriteAccess>
          <ns2:serversName
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">serversNa
me</ns2:serversName>
          <ns2:serversProductionSystem
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">serversPr
oductionSystem</ns2:serversProductionSystem>
          <ns2:serversRootPath
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">/serversR
ootPath</ns2:serversRootPath>
          <ns2:serversSourceType
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">serversSo
urceType</ns2:serversSourceType>
        </ns1:arraysInfo>
      </ns4:return>
    </ns4:getSourceDestinationListResponse>
  </soapenv:Body>
</soapenv:Envelope>
```

```

<ns1:arraysInfo>
  <ns2:serversAddress
    xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">serversAd
    dress1</ns2:serversAddress>

  <ns2:serversConnectOption
    xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">serversCo
    nnectOption1</ns2:serversConnectOption>

  <ns2:serversMaxAccess
    xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">serversMa
    xAccess</ns2:serversMaxAccess>

  <ns2:serversMaxReadAccess
    xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">serversMa
    xReadAccess</ns2:serversMaxReadAccess>

  <ns2:serversMaxThroughput
    xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">serversMa
    xThroughput</ns2:serversMaxThroughput>

  <ns2:serversMaxWriteAccess
    xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">serversMa
    xWriteAccess</ns2:serversMaxWriteAccess>

  <ns2:serversName
    xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">serversNa
    me</ns2:serversName>

  <ns2:serversProductionSystem
    xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">serversPr
    oductionSystem</ns2:serversProductionSystem>

  <ns2:serversRootPath
    xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd"/>

  <ns2:serversSourceType
    xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">serversSo
    urceType</ns2:serversSourceType>

</ns1:arraysInfo>
</ns4:return>
</ns4:getSourceDestinationListResponse>
</soapenv:Body>
</soapenv:Envelope>

```

2.11.25 *getStoragePlanList*

Synopsis

This function returns the list of Storage Plan Names that are defined in the DIVArchive System.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

dwsr:getStoragePlanList

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
options	String: No options have been defined for this command, may be empty or null.

Return Value

dwsr:DivaStoragePlanListResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.
spList	String: List of storage plan names.

Possible **divaStatus** codes include:

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:getStoragePlanList
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
        ode</xs:sessionCode>
      <xs:options
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">options<
        /xs:options>
    </p:getStoragePlanList>
  </env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <ns4:getStoragePlanListResponse
      xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <ns4:return
        xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:type="ns1:DivaStoragePlanListResponse">
        <ns1:divaStatus>divaStatus</ns1:divaStatus>
        <ns1:spList>spList</ns1:spList>
      </ns4:return>
    </ns4:getStoragePlanListResponse>
  </soapenv:Body>
</soapenv:Envelope>
```

2.11.26 *getTapeInfo*

Synopsis

Returns detailed information about a given Tape identified by its barcode.

```
<xsd1:vsNList>VSN1</xsd1:vsNList>
```

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

dws1:getTapeInfo

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
barcode	String: The VSN (<i>barcode</i>) of the Tape for which information is to be returned. <pre><xsd1:vsNList>VSN1</xsd1:vsNList></pre>

Return Value

dwsr:DivaTapeInfoResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.
tapeInfo	DivaDetailedTapeDesc: Container of tape information.

Parameter	Description
externalizationComment	String: If the tape has been ejected from the library, this field may contain information to know where the tape has been stored.
fillingRatio	Int: Filling ratio: The ratio between the index of the last used block on the tape and the total number of blocks on the tape.
fragmentationRatio	Int: Fragmentation ratio: The ratio between the number of used blocks (i.e. blocks that are occupied by objects that have not been deleted) and the index of the last used blocks.
goingToBeRepacked	Boolean: True if this tape is waiting to be Repacked. Acceptable values are true/false or 1/0.
group	String: Group that this Tape belongs to.
inserted	Boolean: True if this Tape is currently inserted. Acceptable values are true/false or 1/0.
mediaFormatId	Int: Data format to be used by the tapes assigned to this group. • DIVA_MEDIA_FORMAT_LEGACY = 0 • DIVA_MEDIA_FORMAT_AXF = 1
remainingSize	Long: How much free space is left on the Tape.
setID	Int: Tape Set ID.
totalSize	Long: Total size of the Tape.
type	String: Tape Type name
typeID	Int: Tape Type ID
vsnn	String: Volume Serial Number

Possible **divaStatus** codes include:

Request-Specific Status Codes

Status Code	Name	Description
1033	DIVA_ERR_TAPE_DOESNT_EXIST	There is no Tape associated with the given barcode.

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
<env:Body>
<p:getTapeInfo
xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <xs:sessionCode
    xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
    ode</xs:sessionCode>
  <xs:barcode
    xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">barcode<
    /xs:barcode>
</p:getTapeInfo>
</env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Body>
<ns4:getTapeInfoResponse
xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <ns4:return
    xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:type="ns1:DivaTapeInfoResponse">
    <ns1:divaStatus>divaStatus</ns1:divaStatus>
    <ns1:tapeInfo>
      <ns2:externalizationComment
        xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">externali
        zationComment</ns2:externalizationComment>
      <ns2:fillingRatio
        xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">fillingRa
        tio</ns2:fillingRatio>
      <ns2:fragmentationRatio
        xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">fragmenta
        tionRatio</ns2:fragmentationRatio>
```

```

<ns2:goingToBeRepacked
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">goingToBe
Repacked</ns2:goingToBeRepacked>

<ns2:group
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">group</ns
2:group>

<ns2:inserted
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">ierrd</ns
2:inserted>

<ns2:remainingSize
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">remaining
Size</ns2:remainingSize>

<ns2:setID
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">setID</ns
2:setID>


<ns2:totalSize
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">ttalSize<
/ns2:totalSize>

<ns2:type
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">type</ns2
:type>

<ns2:typeID
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">typeID</n
s2:typeID>

<ns2:vsu
xmlns:ns2="http://model.api.ws.diva.fpdigital.com/xsd">vsu</ns2:
vsu>

</ns1:tapeInfo>
</ns4:return>
</ns4:getTapeInfoResponse>
</soapenv:Body>
</soapenv:Envelope>

```

2.11.27 *insertTape*

Synopsis

Submits an Enter Request to DIVArchive.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

This request completes when the operator has entered some tapes into the Library. The application is responsible for managing which tapes need to be entered.

dws:insertTape

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
require	Boolean: When true, perform a require request on every Instance located on the successfully inserted tapes. Acceptable values are true/false or 1/0.
priorityLevel	Int: Level of priority for this Request. The priorityLevel can be in the range [0...100] or the value DIVA_DEFAULT_REQUEST_PRIORITY = -1. The value 0 is the lowest priority and 100 the highest. There are five predefined values: • DIVA_REQUEST_PRIORITY_MIN = 0 • DIVA_REQUEST_PRIORITY_LOW = 25 • DIVA_REQUEST_PRIORITY_NORMAL = 50 • DIVA_REQUEST_PRIORITY_HIGH = 75 • DIVA_REQUEST_PRIORITY_MAX = 100 Using the DIVA_DEFAULT_REQUEST_PRIORITY = -1 value, the DIVArchive WS uses the default priority for this request (<i>default request priority is defined in the DIVArchive WS configuration</i>). Using another value (<i>out of the range [0...100] or predefined values</i>) yields a DIVA_ERR_INVALID_PARAMETER error.

Parameter	Description
acsId	Int: Numeric ID of the ACS where the Insert operation should be executed. When acsId = -1 (<i>default used for the first form</i>), Insert attempt will be performed in all known ACSs.
capId	Int: Numeric ID of the CAP from which tapes will be inserted. When capId = -1 (<i>default used for the first form</i>), Insert attempt will be performed in the first available CAP in the specified ACS.

Return Value

dwsr:DivaObjectStatusResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.
requestNumber	Int: Number identifying the Request.

Possible **divaStatus** codes include:

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

See also: **ejectTape**.

REST Request Structure

```

<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:insertTape
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionCode</xs:sessionCode>
      <xs:require
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">require</xs:require>
      <xs:priorityLevel
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">priorityLevel</xs:priorityLevel>
      <xs:acsId
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">acsId</xs:acsId>
    </p:insertTape>
  </env:Body>
</env:Envelope>

```

```

    <xs:capId
      xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">capId</xs:capId>
  </p:insertTape>
</env:Body>
</env:Envelope>

```

REST Response Structure

```

<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <ns4:insertTapeResponse
      xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <ns4:return
        xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:type="ns1:DivaObjectStatusResponse">
        <ns1:divaStatus>divaStatus</ns1:divaStatus>
        <ns1:requestNumber>requestNumber</ns1:requestNumber>
      </ns4:return>
    </ns4:insertTapeResponse>
  </soapenv:Body>
</soapenv:Envelope>

```

2.11.28 *insertTapeShort*

Synopsis

Submits an Enter Request to DIVArchive.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

This request completes when the operator has entered some tapes into the Library. The application is responsible for managing which tapes need to be entered.

dws:insertTapeShort

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
require	Boolean: When true, perform a require request on every Instance located on the successfully inserted tapes. Acceptable values are true/false or 1/0 .
priorityLevel	Int: Level of priority for this request. The priorityLevel can be in the range [0...100] or the value DIVA_DEFAULT_REQUEST_PRIORITY = -1. The value 0 is the lowest priority and 100 the highest. There are five predefined values: • DIVA_REQUEST_PRIORITY_MIN = 0 • DIVA_REQUEST_PRIORITY_LOW = 25 • DIVA_REQUEST_PRIORITY_NORMAL = 50 • DIVA_REQUEST_PRIORITY_HIGH = 75 • DIVA_REQUEST_PRIORITY_MAX = 100 Using the DIVA_DEFAULT_REQUEST_PRIORITY = -1 value, the DIVArchive WS uses the default priority for this request (<i>default request priority is defined in the DIVArchive WS configuration</i>). Using another value (<i>out of the range [0...100] or predefined values</i>) yields a DIVA_ERR_INVALID_PARAMETER error.

Return Value

dwsr:DivaObjectStatusResponse

Parameter	Description
divaStatus	Int: One of these <code>DIVA_STATUS</code> constants. Refer to Appendix A3 DIVArchive WS Status Codes.
requestNumber	Int: Number identifying the Request.

Possible `divaStatus` codes include:

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:insertTapeShort
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
        ode</xs:sessionCode>
      <xs:require
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">requir
        e</xs:require>
      <xs:priorityLevel
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">priori
        tyLevel</xs:priorityLevel>
    </p:insertTapeShort>
  </env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <ns4:insertTapeShortResponse
      xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <ns4:return
        xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:type="ns1:DivaObjectStatusResponse">
```

```
<ns1:divaStatus>divaStatus</ns1:divaStatus>  
<ns1:requestNumber>requestNumber</ns1:requestNumber>  
</ns4:return>  
</ns4:insertTapeShortResponse>  
</soapenv:Body>  
</soapenv:Envelope>
```

2.11.29 *linkObjects*

Synopsis

Submits a Link Archive Request to the DIVArchive System.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

Function provides the opportunity to link together two existing objects – Parent and Child. If the Objects are linked for Delete, anytime the Parent Object is deleted, the Child will also be deleted. If Objects are linked for Restore, anytime the Parent Object is restored, the Child will be restored to the original location from which the Child Object was archived.

dws:linkObjects

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
parentName	String: Parent Object Name.
parentCategory	String: Parent Object Category.
childName	String: Child Object Name.
childCategory	String: Child Object Category.
cascadeDelete	Boolean: Indicates if Child Object should be deleted along with Parent. Acceptable values are true/false or 1/0 .
cascadeRestore	Boolean: Indicates if Child Object should be restored along with Parent. Acceptable values are true/false or 1/0 .

Return Value

dwsr:DivaStatusResponse

Parameter	Description
divaStatus	Int: One of these <code>DIVA_STATUS</code> constants. Refer to Appendix A3 DIVArchive WS Status Codes.

Possible `divaStatus` codes include:

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:linkObjects
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
        ode</xs:sessionCode>
      <xs:parentName
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">parentNa
        me</xs:parentName>
      <xs:parentCategory
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">parentCa
        tegory</xs:parentCategory>
      <xs:childName
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">childNam
        e</xs:childName>
      <xs:childCategory
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">childCat
        egory</xs:childCategory>
      <xs:cascadeDelete
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">cascadeD
        elete</xs:cascadeDelete>
      <xs:cascadeRestore
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">cascadeR
        estore</xs:cascadeRestore>
    </p:linkObjects>
  </env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>

<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <ns4:linkObjectsResponse
xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <ns4:return>
        <ns1:divaStatus
xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd">divaStatus</ns1:divaStatus>
      </ns4:return>
    </ns4:linkObjectsResponse>
  </soapenv:Body>
</soapenv:Envelope>
```

2.11.30 *lockObject*

Synopsis

A call to this function will lock an object. Locked objects cannot be restored.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

dws:lockObject

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
objectName	String: Name of the Object.
category	String: The Category to which the Object was assigned when archived.
options	String: No options have been defined for this command, may be empty or null.

Return Value

dwsr:DivaStatusResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.

Possible **divaStatus** codes include:

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:lockObject
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
        ode</xs:sessionCode>
      <xs:objectName
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectNa
        me</xs:objectName>
      <xs:category
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">category
      </xs:category>
      <xs:options
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">options<
        /xs:options>
    </p:lockObject>
  </env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <ns4:lockObjectResponse
      xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <ns4:return>
        <ns1:divaStatus
          xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd">di
          vaStatus</ns1:divaStatus>
        </ns4:return>
      </ns4:lockObjectResponse>
    </soapenv:Body>
  </soapenv:Envelope>
```

2.11.31 *multipleRestoreObject*

Synopsis

Submits an Object Restore Request to the DIVArchive System using several Destinations.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

DIVArchive WS chooses the appropriate Instance to be restored. This function returns as soon as the DIVArchive WS accepts the Request. To check that the operation was successful, the application must call the function `getRequestInfo`.

NOTES:

If `multipleRestoreObject` is launched with a single Destination, the request is automatically converted to a `restoreObject` request.

The Request will continue even if an error occurs with one of the Destinations.

`dws:multipleRestoreObject`

Parameter	Description
<code>sessionCode</code>	String: Unique ID associated with the client's session.
<code>objectName</code>	String: Name of the Object to be restored.
<code>objectCategory</code>	String: Category assigned to the Object when it was archived. This parameter can be a null string (<i>this may result in an error if several Objects have the same name</i>).
<code>destinations</code>	List of DivaDestinationInfo: List of Destinations (e.g. <i>video server or browsing server</i>) to put the Object files. The names must be known by the DIVArchive configuration description.
<code>qualityOfService</code>	Int: Refer to Section 2.10 for details.

Parameter	Description
priorityLevel	Int: Level of priority for this request. The priorityLevel can be in the range [0...100] or the value DIVA_DEFAULT_REQUEST_PRIORITY = -1. The value 0 is the lowest priority and 100 the highest. There are five predefined values: • DIVA_REQUEST_PRIORITY_MIN = 0 • DIVA_REQUEST_PRIORITY_LOW = 25 • DIVA_REQUEST_PRIORITY_NORMAL = 50 • DIVA_REQUEST_PRIORITY_HIGH = 75 • DIVA_REQUEST_PRIORITY_MAX = 100 Using the DIVA_DEFAULT_REQUEST_PRIORITY = -1 value, the DIVArchive WS uses the default priority for this request (<i>default request priority is defined in the DIVArchive WS configuration</i>). Using another value (<i>out of the range [0...100] or predefined values</i>) yields a DIVA_ERR_INVALID_PARAMETER error.
restoreOptions	String: Additional options that must be used for performing the transfer of data from DIVArchive to the Destination. These options supersede any options specified in the DIVArchive Configuration Database. Currently the possible values for restoreOptions are: • A null string to specify no options. • -login: Login used for some Sources. • -pass: Password in conjunction with the -login option for some Sources.

dwsmd:DestinationInfo

Parameter	Description
destination	String: File path to the destination for restoration.
filePathRoot	String: A Root directory where the Object files will be placed is associated with each Destination. If null (<i>string("")</i>), the files will be placed in the FILES_PATH_ROOT directory specified when archiving the Object (<i>using the archiveObject function</i>).

Return Value

`dwsr:DivaObjectStatusResponse`

Parameter	Description
<code>divaStatus</code>	Int: One of these <code>DIVA_STATUS</code> constants. Refer to Appendix A3 DIVArchive WS Status Codes.
<code>requestNumber</code>	Int: Number identifying the Request.

Possible `divaStatus` codes include:

Request-Specific Status Codes

Status Code	Name	Description
1009	<code>DIVA_ERR_OBJECT_DOESNT_EXIST</code>	The specified Object does not exist in the DIVArchive Database.
1010	<code>DIVA_ERR_SEVERAL_OBJECTS</code>	More than one Object with the specified name exists in the DIVArchive Database.
1018	<code>DIVA_ERR_SOURCE_OR_DESTINATION_DOESN'T_EXIST</code>	The specified Source is not known by the DIVArchive System.
1023	<code>DIVA_ERR_OBJECT_OFFLINE</code>	There is no inserted Instance in the Library and no Actor could provide a Disk Instance.
1027	<code>DIVA_ERR_INSTANCE_DOESNT_EXIST</code>	Instance specified for restoring this Object does not exist.
1028	<code>DIVA_ERR_INSTANCE_OFFLINE</code>	Instance specified for restoring this Object is ejected, or the Actor owning the specified Disk Instance is not available.
1031	<code>DIVA_ERR_OBJECT_IN_USE</code>	The Object is currently in use (<i>being Archived, Restored, Deleted, etc.</i>).
1036	<code>DIVA_ERR_OBJECT_PARTIALLY_DELETED</code>	The specified Object has Instances that are partially deleted.
1039	<code>DIVA_ERR_OBJECT_IS_LOCKED</code>	The specified object is locked by a <code>lockObject</code> request (<i>refer to Section 2.11.30</i>).

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

See also: `restoreObject`, `getRequestInfo`, and `copy` or `copyToGroup`

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
<env:Body>
<p:multipleRestoreObject
xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <xs:sessionCode
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
ode</xs:sessionCode>
  <xs:objectName
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectNa
me</xs:objectName>
  <xs:objectCategory
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectCa
tegory</xs:objectCategory>
  <dws:destinations
xmlns:dws="http://interaction.api.ws.diva.fpdigital.com/xsd">
    <xs:destination
xmlns:xs="http://model.api.ws.diva.fpdigital.com/xsd">destination<
/xs:destination>
    <xs:filePathRoot
xmlns:xs="http://model.api.ws.diva.fpdigital.com/xsd">filePathRoot
</xs:filePathRoot>
  </dws:destinations>
  <xs:qualityOfService
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">qualityO
fService</xs:qualityOfService>
  <xs:priorityLevel
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">priority
Level</xs:priorityLevel>
  <xs:restoreOptions
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">restoreO
ptions</xs:restoreOptions>
</p:multipleRestoreObject>
</env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Body>
<ns4:multipleRestoreObjectResponse
xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <ns4:return
xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="ns1:DivaObjectStatusResponse">
    <ns1:divaStatus>divaStatus</ns1:divaStatus>
    <ns1:requestNumber>requestNumber</ns1:requestNumber>
  </ns4:return>
</ns4:multipleRestoreObjectResponse>
</soapenv:Body>
</soapenv:Envelope>
```

2.11.32 *partialRestore*

Synopsis

Submits a Partial Object Restore request to the DIVArchive Manager and the Manager chooses the appropriate Instance to be restored.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

The Object must have at least one non-spanned Tape Instance. This function returns as soon as the Manager accepts the request. To check that the operation is successful, the application must call the function `getRequestInfo`.

In the event the requested object is on media that is not available, the request will fail. The Media Names (*Tape barcodes and Disk Names*) that contain Instances of the Object will be included in the `additionalInfo` field of the `getRequestInfo` response.

When the `offsetVector` field of a `dws:DivOffsetSourceDest` structure contains more than one `dws:DivOffsetPair` element, the destination file is created by concatenating every corresponding extract.

Note: If an Instance ID is given, the `DIVA_ERR_INVALID_INSTANCE_TYPE` status code may be returned to indicate that this type of Instance is not supported by the function. As of DIVArchive 5.5, all types of instances are supported (*Disk Instances, spanned or not spanned Tape Instances*).

Restrictions

The current implementation only supports the `DIVA_QOS_DEFAULT = 0`, `DIVA_QOS_DIRECT_ONLY = 2`, or `DIVA_QOS_DIRECT_AND_CACHE = 3` values for the quality of service parameter.

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
objectName	String: Name of Object to restore.
objectCategory	String: Category of Object to restore.
instanceID	Int: The ID of a non-spanned Tape Instance, or DIVA_ANY_INSTANCE = -1.
fileList	List of DivaOffsetSourceDest : List of the files of the object to be Partially Restored. Each structure contains the Source File Name, a vector of offset pairs, and a Destination File Name. The same source file may be used in several structures, but destination files must be unique. A file present in the DIVArchive Object may not be in any structure (otherwise it won't be restored).
fileFolder	String: Name of the file or folder to be restored. This is used only when the format is DIVA_FORMAT_FOLDER_BASED , FORMAT_DPX , or FORMAT_FOLDER_BASED . Example: <pre><xs:element name="fileFolder" nillable="true" type="xs:string"/> <xs:element name="option" nillable="true" type="xs:string"/></pre> The option is a string and applies to the folder.
destination	String: Destination (e.g. video server or browsing server) to put the object files. This name must be known by the DIVArchive Configuration Description.
filePathRoot	String: Root folder on the destination where the object files will be placed. If null (string("")), the files will be placed in the filePathRoot folder specified when archiving the object (using the archive function).
qualityOfService	Int: Refer to Section 2.10 for details.
priorityLevel	Int: Level of priority for this request. The priorityLevel can be in the range [0...100] or the value DIVA_DEFAULT_REQUEST_PRIORITY = -1. The value 0 is the lowest priority and 100 the highest. There are five predefined values: • DIVA_REQUEST_PRIORITY_MIN = 0 • DIVA_REQUEST_PRIORITY_LOW = 25 • DIVA_REQUEST_PRIORITY_NORMAL = 50 • DIVA_REQUEST_PRIORITY_HIGH = 75 • DIVA_REQUEST_PRIORITY_MAX = 100

Parameter	Description
priorityLevel (continued)	Using the <code>DIVA_DEFAULT_REQUEST_PRIORITY = -1</code> value, the DIVArchive WS uses the default priority for this request (default request priority is defined in the DIVArchive WS configuration). Using another value (out of the range [0...100] or predefined values) yields a <code>DIVA_ERR_INVALID_PARAMETER</code> error.
restoreOptions	String: Additional options that must be used for performing the transfer of data from DIVArchive to the Destination. These options supersede any options specified in the DIVArchive Configuration Database. Currently the possible values for <code>restoreOptions</code> are: • A null string to specify no options. • <code>-login</code>: Login is used for some Sources. • <code>-pass</code>: Password used in conjunction with the <code>-login</code> option for some Sources. If the option is a string, like <code>RestoreOption</code>, it could be <code>"-r"</code> and applies only when the format is <code>DIVA_FORMAT_FOLDER_BASED</code> and the specified restore folder contains other folders. If the option is an integer, it may be 1, 2, and so on.
startRange	The first frame number to be restored. This is used only when the format is <code>DIVA_FORMAT_DPX</code> .
endRange	The last frame number to be restored. This is used only when the format is <code>DIVA_FORMAT_DPX</code> .
format	Int: Value of the video format. • <code>DIVA_FORMAT_BYTES=0</code> ○ Offsets must be given as byte offsets. • <code>DIVA_FORMAT_BYTES_HEADER=1</code> ○ Deprecated, left for compatibility purposes only. • <code>DIVA_FORMAT_VIDEO_GXF=2</code> ○ Offsets must be given as time codes. ○ The file to be partially restored is expected to be in GXF format. ○ The <code>fileList</code> vector parameter is expected to contain only one <code>dws:DivOffsetSourceDest</code> element as well as the <code>offsetVector</code> vector, which is expected to contain only one <code>dws:DivOffsetPair</code> element.

Parameter	Description
format (continued)	○ Only the <code>DIVA_QOS_DIRECT_ONLY</code> Quality Of Service is supported for this format. • <code>DIVA_FORMAT_VIDEO_SEA=3</code> ○ Offsets must be given as time codes. ○ The file to be partially restored is expected to be in SAF format and provide an index file. • <code>DIVA_FORMAT_VIDEO_AVI_MATROX=4</code> ○ Offsets must be given as time codes. ○ The file list parameter must describe one or several clip parts to be restored. Each part description must meet the following constraints: ○ A part description starts with exactly one <code>dwsn:DivaOffsetSourceDest</code> structure for an AVI file. ○ The source filename must have the .avi or .AVI extension. ○ This structure's <code>offsetVector</code> must contain exactly one <code>dwsn:DivaOffsetPair</code> structure with the time code pair to be restored. ○ A part description then contains one <code>dwsn:DivaOffsetSourceDest</code> structure for each WAV file of the clip (<i>there must be at least one WAV file per clip part</i>). • <code>DIVA_FORMAT_VIDEO_MPEG2_TS=5</code> ○ MPEG2 transport stream. • <code>DIVA_FORMAT_VIDEO_MXF=6</code> ○ MXF video format. • <code>DIVA_FORMAT_VIDEO_PINNACLE=7</code> ○ Pinnacle video format. • <code>DIVA_FORMAT_VIDEO_OMNEON=8</code> ○ Omneon video format. • <code>DIVA_FORMAT_VIDEO_LEITCH=9</code> ○ Leitch video format. • <code>DIVA_FORMAT_VIDEO_QUANTEL=10</code> ○ Quantel QCP video format.

Parameter	Description
format (continued)	• DIVA_FORMAT_AUTODETECT=11 ○ Automatic detection of input format. • DIVA_FORMAT_FOLDER_BASED=12 ○ Fully restore the specific folders. • DIVA_FORMAT_DPX=13 ○ DPX video format. DIVA_FORMAT_BYTES Offsets must be given as byte offsets. When the offsetVector field of a DIVA_OFFSET_SOURCE_DEST structure contains more than one DIVA_OFFSET_PAIR element, the destination file is created by concatenating every corresponding extract. DIVA_FORMAT_BYTES_HEADER Deprecated, left for compatibility purposes only. DIVA_FORMAT_VIDEO_GXF Offsets must be given as time codes. The file to be partially restored is expected to be in GXF format. The fileList vector parameter is expected to contain only one DIVA_OFFSET_SOURCE_DEST element as well as the offsetVector vector, which is expected to contain only one DIVA_OFFSET_PAIR element. Only the DIVA_QOS_DIRECT_ONLY Quality Of Service is supported for this format. DIVA_FORMAT_VIDEO_SEA Offsets must be given as time codes. The file to be partially restored is expected to be in SAF format and provide an index file. A part description then contains one DIVA_OFFSET_SOURCE_DEST structure for each WAV file of the clip (<i>there must be at least one WAV file per clip part</i>). The source filename in each structure must have the .wav or the .WAV extension. DIVA_OFFSET_SOURCE_DEST element, as well as the offsetVector vector, which is expected to contain only one DIVA_OFFSET_PAIR element. The DIVA_OFFSET_SOURCE_DEST element must be associated with the header file only. The Destination Name is also the header.

Parameter	Description
format (continued)	DIVA_FORMAT_VIDEO_OMNEON Offsets must be given as time codes. This type of Partial File Restore can be used to partially restore Quicktime files (<i>referenced and self-contained clips are supported</i>). A detailed matrix of supported Quicktime clips is given in the product description. The <code>fileList</code> vector parameter is expected to contain only one DIVA_OFFSET_SOURCE_DEST element as well as the <code>offsetVector</code> vector, which is expected to contain only one DIVA_OFFSET_PAIR element. The DIVA_OFFSET_SOURCE_DEST element must be associated with the .mov file only if it's not a self-contained clip. DIVA_FORMAT_VIDEO_LEITCH Offsets must be given as time codes. Video file must be encoded using the LEITCH Video Server and the format is LXF. DIVA_FORMAT_VIDEO_QUANTEL Offsets must be given as time codes. This type of Partial File Restore can be used to partially restore Quantel clips that have been archived with a QUANTEL_QCP Source/Destination Type. DIVA_FORMAT_AUTODETECT Offsets must be given as time codes. This type of Partial File Restore can detect video clips with the following archive formats: • QuickTime self-contained. • QuickTime with referenced media files (The .mov file must be in the first position). • DIF + WAV files • AVI with audio interleaved (separated WAV are not supported at this time). • MXF (self-contained) • MPEG PS • LXF

Parameter	Description
format (continued)	- Seachange (<i>The .pd file must be in the first position</i>) the fileList vector parameter is expected to contain only one DIVA_OFFSET_SOURCE_DEST element as well as the offsetVector vector, which is expected to contain only one DIVA_OFFSET_PAIR element. The DIVA_OFFSET_SOURCE_DEST element must be associated with: - The .mov file if it is a Quicktime clip. - The .dif file if it is a dv file. - The .avi file if it is an AVI clip. DIVA_FORMAT_FOLDER_BASED (since version 7.0) Specifies a set of files and folders to be restored. The fileList element is expected to contain one occurrence of DivaFileFolder. A recursive flag may be set to restore subfolders. All specified files and folders are restored. DIVA_FORMAT_DPX (since version 7.0) Specifies a set of intervals, frame X through frame Y, where frames are sorted and transversed alphanumerically. Only files with .tif or .tiff data formats are supported. All files must have an extension of .dpx. The first frame of a DPX Object is Frame 1. Frame numbers of 0 and -1 may be used to refer to the first and last frame. The fileList element is expected to contain one occurrence of DivaRange.

dwsn:DivaOffsetSourceDest

Parameter	Description
destFile	String: The destination filename.
offsetVector	List of DivaOffsetPair: A list of offset pairs.
sourceFile	String: The source filename

dwsn:DivaOffsetPair

Parameter	Description
byteBegin	Long: Byte where the file begins for use with OFFSET_FORMAT_BYTE = 1 .
byteEnd	Long: Byte where the file ends for use with OFFSET_FORMAT_BYTE = 1 .

Parameter	Description
timeCodeBegin	String: Time where the file begins for use with <code>OFFSET_FORMAT_TIMECODE = 2</code> .
timeCodeEnd	String: Time where the file ends for use with <code>OFFSET_FORMAT_TIMECODE = 2</code> .
postType	Int: Type of offset. Either <code>OFFSET_FORMAT_BYTE</code> or <code>OFFSET_FORMAT_TIMECODE</code> . Otherwise it requires you to select either the exact format (<code>OFFSET_FORMAT_BYTE = 1</code> or <code>OFFSET_FORMAT_TIMECODE = 2</code>), or (usually) <code>autodetect=11</code> , and leave the byte offsets blank.

dwsM: DivaFileFolder

Parameter	Description
fileFolder	String: The file or folder name.
Option	String: Option (Ex: <i>-r</i> to recurse folders).

dwsM: DivaRange

Parameter	Description
startRange	int: The first frame number to be restored.
endRange	int: The last frame number to be restored.

Return Value

dwsr: DivaObjectStatusResponse

Parameter	Description
divaStatus	Int: One of these <code>DIVA_STATUS</code> constants. Refer to Appendix A3 DIVArchive WS Status Codes.
requestNumber	Int: Number identifying the Request.

Possible `divaStatus` codes include:

Request-Specific Status Codes

Status Code	Name	Description
1010	<code>DIVA_ERR_SEVERAL_OBJECTS</code>	More than one Object with the specified name exists in the DIVArchive Database.
1018	<code>DIVA_ERR_SOURCE_OR_DESTINATION_DOESN'T_EXIST</code>	The specified Source/Destination is not known by the DIVArchive System.
1023	<code>DIVA_ERR_OBJECT_OFFLINE</code>	There is no inserted Instance in the Library and no Actor could provide a Disk Instance.
1027	<code>DIVA_ERR_INSTANCE_DOESNT_EXIST</code>	Instance specified for restoring this Object does not exist.
1028	<code>DIVA_ERR_INSTANCE_OFFLINE</code>	Instance specified for restoring this Object is ejected, or the Actor owning the specified Disk Instance is not available.
1031	<code>DIVA_ERR_OBJECT_IN_USE</code>	The Object is currently used (being Archived, Restored, Deleted, etc.).
1034	<code>DIVA_ERR_INVALID_INSTANCE_TYPE</code>	Cannot Partially Restore this type of Instance.
1039	<code>DIVA_ERR_OBJECT_IS_LOCKED</code>	The specified object is locked by a <code>lockObject</code> request (<i>refer to Section 2.11.30</i>).

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:partialRestore
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd"
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionCode
      </xs:sessionCode>
    </p:partialRestore>
  </env:Body>
</env:Envelope>
```

```

<xs:objectName
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectNa
me</xs:objectName>
<xs:objectCategory
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectCa
tegory</xs:objectCategory>
<xs:instanceID
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">instance
ID</xs:instanceID>
<dwsml:fileList
xmlns:dwsml="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <xs:element name="fileFolder" nillable="true" type="xs:string"/>
  <xs:element name="option" nillable="true" type="xs:string"/>
  <xs:destFile
xmlns:xs="http://model.api.ws.diva.fpdigital.com/xsd">destFile</xs
:destFile>
  <dwsml:offsetVector
xmlns:dwsml="http://model.api.ws.diva.fpdigital.com/xsd">
    <xs:byteBegin
xmlns:xs="http://model.api.ws.diva.fpdigital.com/xsd">byteBegin<
/xs:byteBegin>
    <xs:byteEnd
xmlns:xs="http://model.api.ws.diva.fpdigital.com/xsd">byteEnd</xs
:byteEnd>
    <xs:timeCodeBegin
xmlns:xs="http://model.api.ws.diva.fpdigital.com/xsd">timeCodeBe
gin</xs:timeCodeBegin>
    <xs:timeCodeEnd
xmlns:xs="http://model.api.ws.diva.fpdigital.com/xsd">timeCodeEn
d</xs:timeCodeEnd>
  <xs:postType
xmlns:xs="http://model.api.ws.diva.fpdigital.com/xsd">postType</xs
:postType>
  </dwsml:offsetVector>
  <xs:sourceFile
xmlns:xs="http://model.api.ws.diva.fpdigital.com/xsd">sourceFile</
xs:sourceFile>
</dwsml:fileList>
<xs:destination
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">destinat
ion</xs:destination>
<xs:filePathRoot
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">filesPat
hRoot</xs:filePathRoot>
<xs:qualityOfService
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">qualityO
fService</xs:qualityOfService>
<xs:priorityLevel
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">priority
Level</xs:priorityLevel>
<xs:restoreOptions
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">restoreO
ptions</xs:restoreOptions>
<xs:format
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">format</
xs:format>

```

```
</p:partialRestore>
</env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Body>
<ns4:partialRestoreResponse
xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <ns4:return
    xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:type="ns1:DivaObjectStatusResponse">
    <ns1:divaStatus>divaStatus</ns1:divaStatus>
    <ns1:requestNumber>requestNumber</ns1:requestNumber>
  </ns4:return>
</ns4:partialRestoreResponse>
</soapenv:Body>
</soapenv:Envelope>
```

2.11.33 *release*

Synopsis

Indicates to the DIVArchive System that this Instance can be externalized.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

If this Instance has already been released, this function has no effect. The Control GUI displays the list of instances that are **RELEASED** and **INSERTED**.

dws:release

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
objectName	String: Name of the Object to be copied.
categoryName	String: Category assigned to the Object when it was archived. This parameter can be a null string (<i>this may result in an error if several Objects have the same name</i>).
instanceID	Int: A value of <code>DIVA_EVERY_INSTANCE = -1</code> forces this function to apply to every Instance of the given Object.

Return Value

dwsr:DivaStatusResponse

Parameter	Description
divaStatus	Int: One of these <code>DIVA_STATUS</code> constants. Refer to Appendix A3 DIVArchive WS Status Codes.

Possible `divaStatus` codes include:

Request-Specific Status Codes

Status Code	Name	Description
1009	<code>DIVA_ERR_OBJECT_DOESNT_EXIST</code>	The specified Object does not exist in the DIVArchive Database.
1010	<code>DIVA_ERR_SEVERAL_OBJECTS</code>	More than one Object with the specified name exists in the DIVArchive Database.
1027	<code>DIVA_ERR_INSTANCE_DOESNT_EXIST</code>	The specified Instance does not exist.
1029	<code>DIVA_ERR_INSTANCE_MUST_BE_ON_TAPE</code>	The specified Instance is not a Tape Instance.
1030	<code>DIVA_ERR_NO_INSTANCE_TAPE_EXIST</code>	No Tape Instance exists for this Object.

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

See also: `require`

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:release xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
        ode</xs:sessionCode>
      <xs:objectName
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectNa
        me</xs:objectName>
      <xs:categoryName
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">category
        Name</xs:categoryName>
      <xs:instanceID
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">instance
        ID</xs:instanceID>
    </p:release>
  </env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Body>
<ns4:releaseResponse
xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <ns4:return>
    <ns1:divaStatus
xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd">di
    vaStatus</ns1:divaStatus>
  </ns4:return>
</ns4:releaseResponse>
</soapenv:Body>
</soapenv:Envelope>
```

2.11.34 **require**

Synopsis

Indicates to the DIVArchive System that this Instance should be inserted.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

If the Instance is already inserted, this function has no effect. The Control GUI displays the list of Instances that are **REQUIRED** and **EJECTED**.

dwsr:require

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
objectName	String: Name of the Object to be copied.
categoryName	String: Category assigned to the Object when it was archived. This parameter can be a null string (<i>this may result in an error if several Objects have the same name</i>).
instanceID	Int: A value of DIVA_EVERY_INSTANCE = -1 forces the function to apply to every Instance of the given Object.

Return Value

dwsr:DivaStatusResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.

Possible `divaStatus` codes include:

Request-Specific Status Codes

Status Code	Name	Description
1009	<code>DIVA_ERR_OBJECT_DOESNT_EXIST</code>	The specified Object does not exist in the DIVArchive Database.
1010	<code>DIVA_ERR_SEVERAL_OBJECTS</code>	More than one Object with the specified name exists in the DIVArchive Database.
1027	<code>DIVA_ERR_INSTANCE_DOESNT_EXIST</code>	The specified Instance does not exist.
1029	<code>DIVA_ERR_INSTANCE_MUST_BE_ON_TAPE</code>	The specified Instance is not a Tape Instance.
1030	<code>DIVA_ERR_NO_INSTANCE_TAPE_EXIST</code>	No Tape Instance exists for this Object.

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

See also: `release`

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:require xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
        ode</xs:sessionCode>
      <xs:objectName
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectNa
        me</xs:objectName>
      <xs:categoryName
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">category
        Name</xs:categoryName>
      <xs:instanceID
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">instance
        ID</xs:instanceID>
    </p:require>
  </env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Body>
<ns4:requireResponse
xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <ns4:return>
    <ns1:divaStatus
xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd">di
      vaStatus</ns1:divaStatus>
    </ns4:return>
  </ns4:requireResponse>
</soapenv:Body>
</soapenv:Envelope>
```

2.11.35 *restoreInstance*

Synopsis

Restores an Object from a specific Instance.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

If this Instance is externalized, the operation fails even if there are other instances available for the object.

dws:restoreInstance

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
objectName	String: Name of the Object to be restored.
objectCategory	String: Category assigned to the Object when it was archived. This parameter can be a null string (<i>this may result in an error if several Objects have the same name</i>).
instanceID	Int: Instance Identifier.
destination	String: Destination (e.g. video server or browsing server) to put the Object files. This name must be known by the DIVArchive configuration description
filePathRoot	String: Root directory on the Destination to which the Object files will be placed. If null (<i>string("")</i>), the files will be placed in the FILES_PATH_ROOT directory specified when archiving the Object (<i>using the DIVA_archiveObject() function</i>).
qualityOfService	Int: Refer to Section 2.10 for details.

Parameter	Description
priorityLevel	Int: Level of priority for this Request. The priorityLevel can be in the range [0...100] or the value DIVA_DEFAULT_REQUEST_PRIORITY = -1. The value 0 is the lowest priority and 100 is the highest. There are five predefined values: • DIVA_REQUEST_PRIORITY_MIN = 0 • DIVA_REQUEST_PRIORITY_LOW = 25 • DIVA_REQUEST_PRIORITY_NORMAL = 50 • DIVA_REQUEST_PRIORITY_HIGH = 75 • DIVA_REQUEST_PRIORITY_MAX = 100 Using the DIVA_DEFAULT_REQUEST_PRIORITY = -1 value, the DIVArchive WS uses the default priority for this request (<i>default request priority is defined in the DIVArchive WS configuration</i>). Using another value (<i>out of the range [0...100] or predefined values</i>) yields a DIVA_ERR_INVALID_PARAMETER error.
restoreOptions	String: Additional options that must be used for performing the transfer of data from DIVArchive to the Destination. These options supersede any options specified in the DIVArchive Configuration Database. Currently the possible values for restoreOptions are: • A null string to specify no options. • -login: Login is used for some Sources. • -pass: Password used in conjunction with the -login option for some Sources.

Return Value

dwsr:DivaObjectStatusResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.
requestNumber	Int: Number identifying the Request.

Possible `divaStatus` codes include:

Request-Specific Status Codes

Status Code	Name	Description
1009	<code>DIVA_ERR_OBJECT_DOESNT_EXIST</code>	The specified Object does not exist in the DIVArchive Database.
1010	<code>DIVA_ERR_SEVERAL_OBJECTS</code>	More than one Object with the specified name exists in the DIVArchive Database.
1018	<code>DIVA_ERR_SOURCE_OR_DESTINATION_DOESN'T_EXIST</code>	The specified Source is not known by the DIVArchive System.
1023	<code>DIVA_ERR_OBJECT_OFFLINE</code>	There is no inserted Instance in the Library and no Actor could provide a Disk Instance.
1027	<code>DIVA_ERR_INSTANCE_DOESNT_EXIST</code>	Instance specified for restoring this Object does not exist.
1028	<code>DIVA_ERR_INSTANCE_OFFLINE</code>	Instance specified for restoring this Object is ejected, or the Actor owning the specified Disk Instance is not available.
1031	<code>DIVA_ERR_OBJECT_IN_USE</code>	The Object is currently in use (<i>being Archived, Restored, Deleted, etc.</i>).
1036	<code>DIVA_ERR_OBJECT_PARTIALLY_DELETED</code>	The specified Object has Instances that are partially deleted.
1039	<code>DIVA_ERR_OBJECT_IS_LOCKED</code>	The specified object is locked by a <code>lockObject</code> request (<i>refer to Section 2.11.30</i>).

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

See also: `archiveObject` and `getObjectInfo`

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
<env:Body>
<p:restoreInstance
xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <xs:sessionCode
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
ode</xs:sessionCode>
  <xs:objectName
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectNa
me</xs:objectName>
  <xs:objectCategory
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectCa
tegory</xs:objectCategory>
  <xs:instanceID
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">instance
ID</xs:instanceID>
  <xs:destination
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">destinat
ion</xs:destination>
  <xs:filePathRoot
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">filesPat
hRoot</xs:filePathRoot>
  <xs:qualityOfService
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">qualityO
fService</xs:qualityOfService>
  <xs:priorityLevel
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">priority
Level</xs:priorityLevel>
  <xs:restoreOptions
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">restoreO
ptions</xs:restoreOptions>
</p:restoreInstance>
</env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Body>
<ns4:restoreInstanceResponse
xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
```

```
<ns4:return
xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="ns1:DivaObjectStatusResponse">
  <ns1:divaStatus>divaStatus</ns1:divaStatus>
  <ns1:requestNumber>requestNumber</ns1:requestNumber>
</ns4:return>
</ns4:restoreInstanceResponse>
</soapenv:Body>
</soapenv:Envelope>
```

2.11.36 *restoreObject*

Synopsis

Submits an Object Restore Request to the DIVArchive System and the DIVArchive System chooses the appropriate Instance to be restored.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

This function returns as soon as the DIVArchive WS accepts the request. To check that the operation was successful, the application must call the function `getRequestInfo`.

In the event the requested object is on media that is not available, the request will fail. The Media Names (*Tape Bar-codes and Disk Names*) that contain Instances of the Object will be included in the `additionalInfo` field of the `getRequestInfo` response.

`dws:restoreObject`

Parameter	Description
<code>sessionCode</code>	String: Unique ID associated with the client's session.
<code>objectName</code>	String: Name of the Object to be restored.
<code>objectCategory</code>	String: Category assigned to the Object when it was archived. This parameter can be a null string (<i>this may result in an error if several Objects have the same name</i>).
<code>destination</code>	String: Destination (e.g. video server or browsing server) for the Object files. This name must be known by the DIVArchive configuration description.
<code>filePathRoot</code>	String: Root directory on the Destination where the Object files will be placed. If null (<code>string("")</code>), the files will be placed in the <code>FILES_PATH_ROOT</code> directory specified when archiving the Object (<i>using the <code>DIVA_archiveObject()</code> function</i>).
<code>qualityOfService</code>	Int: Refer to Section 2.10 for details.

Parameter	Description
priorityLevel	Int: Level of priority for this Request. The priorityLevel can be in the range [0...100] or the value DIVA_DEFAULT_REQUEST_PRIORITY = -1. The value 0 is the lowest priority and 100 the highest. There are five predefined values: • DIVA_REQUEST_PRIORITY_MIN = 0 • DIVA_REQUEST_PRIORITY_LOW = 25 • DIVA_REQUEST_PRIORITY_NORMAL = 50 • DIVA_REQUEST_PRIORITY_HIGH = 75 • DIVA_REQUEST_PRIORITY_MAX = 100 Using the DIVA_DEFAULT_REQUEST_PRIORITY = -1 value, the DIVArchive WS uses the default priority for this request (<i>default request priority is defined in the DIVArchive WS configuration</i>). Using another value (<i>out of the range [0...100] or predefined values</i>) yields a DIVA_ERR_INVALID_PARAMETER error.
restoreOptions	String: Additional options that must be used for performing the transfer of data from DIVArchive to the Destination. These options supersede any options specified in the DIVArchive Database. Currently the possible values for restoreOptions are: • A null string to specify no options. • -login: Login is used for some sources. • -pass: Password used in conjunction with the -login option for some sources.

Return Value

dwsr:DivableObjectStatusResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.
requestNumber	Int: Number identifying the Request.

Possible `divaStatus` codes include:

Request-Specific Status Codes

Status Code	Name	Description
1009	<code>DIVA_ERR_OBJECT_DOESNT_EXIST</code>	The specified Object does not exist in the DIVArchive Database.
1010	<code>DIVA_ERR_SEVERAL_OBJECTS</code>	More than one Object with the specified name exists in the DIVArchive Database.
1018	<code>DIVA_ERR_SOURCE_OR_DESTINATION_DOESN'T_EXIST</code>	The specified Source is not known by the DIVArchive System.
1023	<code>DIVA_ERR_OBJECT_OFFLINE</code>	There is no inserted Instance in the Library and no Actor could provide a Disk Instance.
1027	<code>DIVA_ERR_INSTANCE_DOESNT_EXIST</code>	Instance specified for restoring this Object does not exist.
1028	<code>DIVA_ERR_INSTANCE_OFFLINE</code>	Instance specified for restoring this Object is ejected, or the Actor owning the specified Disk Instance is not available.
1031	<code>DIVA_ERR_OBJECT_IN_USE</code>	The Object is currently in use (<i>being Archived, Restored, Deleted, etc.</i>).
1036	<code>DIVA_ERR_OBJECT_PARTIALLY_DELETED</code>	The specified Object has Instances that are partially deleted.
1039	<code>DIVA_ERR_OBJECT_IS_LOCKED</code>	The specified object is locked by a <code>lockObject</code> request (<i>refer to Section 2.11.30</i>).

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

See Also: `getRequestInfo` and `copy` or `copyToGroup`

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:restoreObject
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
        ode</xs:sessionCode>
      <xs:objectName
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectNa
        me</xs:objectName>
      <xs:objectCategory
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectCa
        tegory</xs:objectCategory>
      <xs:destination
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">destinat
        ion</xs:destination>
      <xs:filePathRoot
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">filesPat
        hRoot</xs:filePathRoot>
      <xs:qualityOfService
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">qualityO
        fService</xs:qualityOfService>
      <xs:priorityLevel
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">priority
        Level</xs:priorityLevel>
      <xs:restoreOptions
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">restoreO
        ptions</xs:restoreOptions>
    </p:restoreObject>
  </env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
```

```

<ns4:restoreObjectResponse
xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">

  <ns4:return
xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="ns1:DivaObjectStatusResponse">

    <ns1:divaStatus>divaStatus</ns1:divaStatus>

    <ns1:requestNumber>requestNumber</ns1:requestNumber>

  </ns4:return>
</ns4:restoreObjectResponse>
</soapenv:Body>
</soapenv:Envelope>

```

2.11.37 *transcodeArchive*

Synopsis

This request reads a copy of an object currently saved in DIVArchive, transcodes it, and saves the transcoded file as a new object.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

dws:transcodeArchive

Parameter	Description
<i>sessionCode</i>	String: Unique ID associated with the client's session.
<i>parentObjectName</i>	String: Name of the parent Object.
<i>parentObjectCategory</i>	String: Category that the parent Object is in.
<i>instance</i>	Int: The instance to use for this request.
<i>objectName</i>	String: Name of this Object.
<i>objectCategory</i>	String: Category that this Object is in.
<i>mediaName</i>	String: Name of the Media on which to look for the Object.
<i>comments</i>	String: Optional information describing the Object (<i>can be a null string</i>).

Parameter	Description
archiveOptions	String: Additional options that must be used for transcoding the data. These options supersede any options specified in the DIVArchive Configuration Database. Currently the possible values for archiveOptions are: • A null string to specify no options. • -r: Specifies that every name in filenamesList that refers to a directory must be scanned recursively. This also applies when a Files Path Root is specified and '*' is used to designate the file(s) to be archived. This option may be used when archiving from a local source or from a standard FTP server. • -login: Login is used for some sources. • -pass: Password used in conjunction with the -login option for some sources.
qualityOfService	Int: Refer to Section 2.10 for details.
bCascadeDelete	Boolean: Indicates if Child Object should be deleted along with Parent. Acceptable values are true/false or 1/0.
priorityLevel	Int: Level of priority for this request. The priorityLevel can be in the range [0...100] or the value DIVA_DEFAULT_REQUEST_PRIORITY = -1. The value 0 is the lowest priority and 100 the highest. There are five predefined values: • DIVA_REQUEST_PRIORITY_MIN = 0 • DIVA_REQUEST_PRIORITY_LOW = 25 • DIVA_REQUEST_PRIORITY_NORMAL = 50 • DIVA_REQUEST_PRIORITY_HIGH = 75 • DIVA_REQUEST_PRIORITY_MAX = 100 Using the DIVA_DEFAULT_REQUEST_PRIORITY = -1 value, the DIVArchive WS uses the default priority for this request (<i>default request priority is defined in the DIVArchive WS configuration</i>). Using another value (<i>out of the range [0...100] or predefined values</i>) yields a DIVA_ERR_INVALID_PARAMETER error.

Return Value

`dwsr:DivaObjectStatusResponse`

Parameter	Description
<code>divaStatus</code>	Int: One of these <code>DIVA_STATUS</code> constants. Refer to Appendix A3 DIVArchive WS Status Codes.
<code>requestNumber</code>	Int: Number identifying the Request.

Possible `divaStatus` codes include:

Request-Specific Status Codes

Status Code	Name	Description
1009	<code>DIVA_ERR_OBJECT_DOESNT_EXIST</code>	The specified Object does not exist in the DIVArchive Database.
1010	<code>DIVA_ERR_SEVERAL_OBJECTS</code>	More than one Object with the specified name exists in the DIVArchive Database.
1016	<code>DIVA_ERR_OBJECT_ALREADY_EXISTS</code>	An object with the Name and Category already exists in the DIVArchive System.
1031	<code>DIVA_ERR_OBJECT_IN_USE</code>	The Object is currently in use (<i>being Archived, Restored, Deleted, etc.</i>).
1036	<code>DIVA_ERR_OBJECT_PARTIALLY_DELETED</code>	The specified Object has Instances that are partially deleted.

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:transcodeArchive
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionCode</xs:sessionCode>
    </p:transcodeArchive>
  </env:Body>
</env:Envelope>
```

```

<xs:parentObjectName
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">parentOb
jectName</xs:parentObjectName>

<xs:parentObjectCategory
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">parentOb
jectCategory</xs:parentObjectCategory>

<xs:instance
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">instance
</xs:instance>

<xs:objectName
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectNa
me</xs:objectName>

<xs:objectCategory
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectCa
tegory</xs:objectCategory>

<xs:mediaName
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">mediaNam
e</xs:mediaName>

<xs:comments
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">comments
</xs:comments>

<xs:archiveOptions
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">archiveO
ptions</xs:archiveOptions>

<xs:qualityOfService
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">qualityO
fService</xs:qualityOfService>

<xs:bCascadeDelete
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">bCascade
Delete</xs:bCascadeDelete>

<xs:priorityLevel
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">priority
Level</xs:priorityLevel>
</p:transcodeArchive>
</env:Body>
</env:Envelope>

```

REST Response Structure

```

<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Body>
<ns4:transcodeArchiveResponse
xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">

```

```
<ns4:return
xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="ns1:DivaObjectStatusResponse">
  <ns1:divaStatus>divaStatus</ns1:divaStatus>
  <ns1:requestNumber>requestNumber</ns1:requestNumber>
</ns4:return>
</ns4:transcodeArchiveResponse>
</soapenv:Body>
</soapenv:Envelope>
```

2.11.38 *transferFiles*

Synopsis

Submits a Transfer Files Request to the DIVArchive System.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

This function returns as soon as the DIVArchive WS accepts the Request. To check that the operation was completed successfully, the application must call the function `getRequestInfo`.

dws:transferFiles

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
source	String: Name of the Source (<i>e.g. video server, browsing server</i>). This name must be known by the DIVArchive configuration description.
sourcePathRoot	String: Root directory for the files specified by the filenamesList parameter.
filenamesList	List of String: List of file path names relative to the directory specified by the sourcePathRoot parameter. When the sourcePathRoot is null, path names must be absolute names. To specify more than one filename multiple filenamesList parameters must be used as shown below: <pre><!--1 or more repetitions--> <xsd1:fileNamesList>test1.txt</xsd1:fileNamesList> <xsd1:fileNamesList>test2.txt</xsd1:fileNamesList></pre>

Parameter	Description
destination	String: Name of the Destination (e.g. <i>video server, browsing server</i>). This name must be known by the DIVArchive configuration description.
destinationPathRoot	String: Root directory where the files will be placed at the Destination.
priorityLevel	Int: Level of priority for this request. The priorityLevel can be in the range [0...100] or the value DIVA_DEFAULT_REQUEST_PRIORITY = -1. The value 0 is the lowest priority and 100 the highest. There are five predefined values: • DIVA_REQUEST_PRIORITY_MIN = 0 • DIVA_REQUEST_PRIORITY_LOW = 25 • DIVA_REQUEST_PRIORITY_NORMAL = 50 • DIVA_REQUEST_PRIORITY_HIGH = 75 • DIVA_REQUEST_PRIORITY_MAX = 100 Using the DIVA_DEFAULT_REQUEST_PRIORITY = -1 value, the DIVArchive WS uses the default priority for this request (<i>default request priority is defined in the DIVArchive WS configuration</i>). Using another value (<i>out of the range [0...100] or predefined values</i>) yields a DIVA_ERR_INVALID_PARAMETER error.

Return Value

dwsr: `DivaObjectStatusResponse`

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.
requestNumber	Int: Number identifying the Request.

Possible **divaStatus** codes include:

Request-Specific Status Codes

Status Code	Name	Description
1018	DIVA_ERR_SOURCE_OR_DESTINATION_DOESN'T_EXIST	The specified Source/Destination is not known by the DIVArchive System.

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

See Also: `getRequestInfo`

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
<env:Body>
  <p:transferFiles
xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
    <xs:sessionCode
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
ode</xs:sessionCode>

    <xs:source
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">source</
xs:source>

    <xs:sourcePathRoot
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sourcePa
thRoot</xs:sourcePathRoot>

    <xs:fileNameList
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">fileNa
meList</xs:fileNameList>

    <xs:destination
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">destinat
ion</xs:destination>

    <xs:destinationPathRoot
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">destinat
ionPathRoot</xs:destinationPathRoot>

    <xs:priorityLevel
xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">priority
Level</xs:priorityLevel>
  </p:transferFiles>
</env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
<soapenv:Body>
<ns4:transferFilesResponse
xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
  <ns4:return
xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:type="ns1:DivaObjectStatusResponse">
```

```
    <ns1:divaStatus>divaStatus</ns1:divaStatus>
    <ns1:requestNumber>requestNumber</ns1:requestNumber>
  </ns4:return>
</ns4:transferFilesResponse>
</soapenv:Body>
</soapenv:Envelope>
```

2.11.39 *unlockObject*

Synopsis

A call to this function will unlock an object. Locked objects cannot be restored.

Version

This request is available in the DIVArchive WS API since version DIVArchive WS 1.0.

Description

See the request parameters listed and described below.

For the call syntax:

- **SOAP:** Refer to the WSDL and schema files provided.
- **REST:** See the syntax provided at the end of the chapter.
- Refer to the TryIt Service for sample operations.
 - Note: The TryIt Service only works with REST. For SOAP testing use the SOAPUI Tool.

dws:unlockObject

Parameter	Description
sessionCode	String: Unique ID associated with the client's session.
objectName	String: Name of the Object.
category	String: The Category to which the Object was assigned when archived.
options	String: No options have been defined for this command, may be empty or null.

Return Value

dwsr:DivaStatusResponse

Parameter	Description
divaStatus	Int: One of these DIVA_STATUS constants. Refer to Appendix A3 DIVArchive WS Status Codes.

Possible **divaStatus** codes include:

Generic Status Codes: Refer to Table 9: Generic Status Codes for all Commands.

REST Request Structure

```
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/">
  <env:Body>
    <p:unlockObject
      xmlns:p="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <xs:sessionCode
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">sessionC
        ode</xs:sessionCode>
      <xs:objectName
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">objectNa
        me</xs:objectName>
      <xs:category
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">category
      </xs:category>
      <xs:options
        xmlns:xs="http://interaction.api.ws.diva.fpdigital.com/xsd">options<
        /xs:options>
    </p:unlockObject>
  </env:Body>
</env:Envelope>
```

REST Response Structure

```
<?xml version='1.0' encoding='UTF-8'?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <ns4:unlockObjectResponse
      xmlns:ns4="http://interaction.api.ws.diva.fpdigital.com/xsd">
      <ns4:return>
        <ns1:divaStatus
          xmlns:ns1="http://response.model.api.ws.diva.fpdigital.com/xsd">di
          vaStatus</ns1:divaStatus>
        </ns4:return>
      </ns4:unlockObjectResponse>
    </soapenv:Body>
  </soapenv:Envelope>
```

APPENDIX

A1 List of special authorized characters in DIVArchive

Characters / Fields	Name	Category	Source	Media	Path	File	Comments	Options
~	✓	✓	✓	✓	✓	✓	✓	✓
`	✓	✓	✓	✓	✓	✓	✓	✓
!	✓	✓	✓	✓	✓	✓	✓	✓
@	✓	✓	✓	✓	✓	✓	✓	✓
#	✓	✓	✓	✓	✓	✓	✓	✓
\$	✓	✓	✓	✓	✓	✓	✓	✓
%	✓	✓	✓	✓	✓	✓	✓	✓
^	✓	✓	✓	✓	✓	✓	✓	✓
&	✓	✓	✓	✓	✓	✓	✓	NO
*	✓	✓	✓	✓	NO	✓	✓	✓
(	✓	✓	✓	✓	✓	✓	✓	✓
)	✓	✓	✓	✓	✓	✓	✓	✓
_	✓	✓	✓	✓	✓	✓	✓	✓
-	✓	✓	✓	✓	✓	✓	✓	✓
+	✓	✓	✓	✓	✓	✓	✓	✓
=	✓	✓	✓	✓	✓	✓	✓	✓
	✓	✓	✓	✓	NO	✓	✓	✓
\	✓	✓	✓	✓	NO	✓	✓	✓
}	✓	✓	✓	✓	✓	✓	✓	✓
]	✓	✓	✓	✓	✓	✓	✓	✓
{	✓	✓	✓	✓	✓	✓	✓	✓

Characters / Fields	Name	Category	Source	Media	Path	File	Comments	Options
[	✓	✓	✓	✓	✓	✓	✓	✓
:	✓	✓	✓	✓	NO	✓	✓	✓
;	✓	✓	✓	✓	✓ ⁽¹⁾	✓	✓	✓
“	✓	✓	✓	✓	NO	✓	✓	NO
‘	✓	✓	NO	NO	✓ ⁽¹⁾	✓	✓	✓
<	✓	✓	✓	✓	NO	✓	✓	NO
,	✓	✓	✓	✓	✓ ⁽¹⁾	✓	✓	✓
>	✓	✓	✓	✓	NO	✓	✓	✓
.	✓	✓	✓	✓	NO	✓	✓	✓
?	✓	✓	✓	✓	NO	✓	✓	✓
/	✓	✓	✓	✓	NO	✓	✓	✓
Space	✓	✓	✓	✓	NO	✓	✓	✓

NOTE: In a Windows environment, the following File/Folder Names restrictions apply:

(1) Depends upon file system restrictions.

File/Folder names cannot consist solely of one or more Space(s).

File/Folder names cannot contain a double-quote (i.e. “).

A2 *Maximum number characters allowed*

	Name	Category	Source	Media	Path	File	Comments	Options
Maximum number of characters	192	96	96	96	4000	1536	4000	768

A3 DIVArchive WS Status Codes

Status Code	Name	Description
1000	DIVA_OK	The function completes normally.
1001	DIVA_ERR_UNKNOWN	An unknown status has been received from the DIVArchive WS.
1002	DIVA_ERR_INTERNAL	An internal error has been detected by the DIVArchive System.
1003	DIVA_ERR_NO_ARCHIVE_SYSTEM	There are no DIVArchive Systems available.
1004	DIVA_ERR_BROKEN_CONNECTION	The connection between the DIVArchive System and DIVArchive WS has been broken.
1005	DIVA_ERR_DISCONNECTING	Client is in the process of disconnecting with the DIVArchive System.
1006	DIVA_ERR_ALREADY_CONNECTED	The Client is attempting to create multiple sessions for a single application.
1007	DIVA_ERR_WRONG_VERSION	The Client is trying to connect the DIVArchive WS to the DIVArchive System using the wrong version.
1008	DIVA_ERR_INVALID_PARAMETER	A parameter value has not been understood by the DIVArchive System.
1009	DIVA_ERR_OBJECT_DOESNT_EXIST	The specified object does not exist in the DIVArchive Database and is not being archived.
1010	DIVA_ERR_SEVERAL_OBJECTS	More than one Object with the specified name exists in the DIVArchive Database.
1011	DIVA_ERR_NO_SUCH_REQUEST	requestNumber identifies no Request.

Status Code	Name	Description
1012	DIVA_ERR_NOT_CANCELABLE	The Request specified for cancelation is not able to be cancelled.
1013	DIVA_ERR_SYSTEM_IDLE	The DIVArchive System is no longer able to accept connections and queries.
1014	DIVA_ERR_WRONG_LIST_SIZE	The <code>maxListSize</code> parameter is too big (<i>greater than 500</i>), or too small (<i>less than 1</i>).
1015	DIVA_ERR_LIST_NOT_INITIALIZED	The <code>DIVA_initObjectsList()</code> function has not been called first.
1016	DIVA_ERR_OBJECT_ALREADY_EXISTS	An object with the Name and Category already exists in the DIVArchive System.
1017	DIVA_ERR_GROUP_DOESNT_EXIST	The Group or the Array of Disks does not exist.
1018	DIVA_ERR_SOURCE_OR_DESTINATION_DOESN'T_EXIST	The specified Source/Destination is not known by the DIVArchive System.
1019	DIVA_WARN_NO_MORE_OBJECTS	The end of the list has been reached during the call (see <i>Description</i>).
1020	DIVA_ERR_NOT_CONNECTED	No open connection.
1021	DIVA_ERR_GROUP_ALREADY_EXISTS	The specified Group already exists.
1022	DIVA_ERR_GROUP_IN_USE	The Group contains at least one Object Instance.
1023	DIVA_ERR_OBJECT_OFFLINE	There is no inserted Instance in the Library and no Actor could provide a Disk Instance.

Status Code	Name	Description
1024	DIVA_ERR_TIMEOUT	Time out limit has been reached before communication between the DIVArchive System and DIVArchive WS could be performed. Time out duration is set by the <code>DIVARCHIVE_RESPONSE_TIMEOUT_IN_MINUTES</code> variable and equals 10 minutes by default.
1025	DIVA_ERR_LAST_INSTANCE	<code>deleteObject</code> must be used to delete the last Instance of an Object.
1026	DIVA_ERR_PATH_DESTINATION	The specified path does not exist on the Destination DIVArchive System.
1027	DIVA_ERR_INSTANCE_DOESNT_EXIST	Instance specified for restoring this Object does not exist.
1028	DIVA_ERR_INSTANCE_OFFLINE	Instance specified for restoring this Object is ejected, or the Actor owning the specified Disk Instance is not available.
1029	DIVA_ERR_INSTANCE_MUST_BE_ON_TAPE	The specified Instance is not a Tape Instance.
1030	DIVA_ERR_NO_INSTANCE_TAPE_EXIST	No Tape Instance exists for this Object.
1031	DIVA_ERR_OBJECT_IN_USE	The specified object is currently being read or deleted.
1032	DIVA_ERR_CANNOT_ACCEPT_MORE_REQUESTS	Count of simultaneous requests reached the maximum allowed value. This variable is set in the <code>conf.properties</code> configuration file. The default is 300.
1033	DIVA_ERR_TAPE_DOESNT_EXIST	There is no Tape associated with the given barcode.
1034	DIVA_ERR_INVALID_INSTANCE_TYPE	Cannot Partially Restore this type of Instance.

Status Code	Name	Description
1035	DIVA_ERR_ACCESS_DENIED	Permissions are not sufficient enough to perform the requested operation or the object is currently in use.
1036	DIVA_ERR_OBJECT_PARTIALLY_DELETED	The specified Object has Instances that are partially deleted.
1038	DIVA_ERR_COMPONENT_NOT_FOUND	The specified component could not be found.
1039	DIVA_ERR_OBJECT_IS_LOCKED	The specified object is locked and in use by another process (<i>refer to Section 2.11.30</i>).