Oracle® DIVArchive

DIVAprotectWS API User's Guide

Release 7.3

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Oracle DIVArchive DIVAprotectWS API User's Guide, Release 7.3

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1 Introduction

1.1 Document Purpose and Scope

This Guide describes the use of the DIVAprotectWS API for the Oracle DIVArchive Suite version 7.3 including major functions, installation and configuration, and updating.

For additional information refer to the *Oracle DIVArchive WS API Reference Manual* and *Oracle DIVArchive DIVAprotect User Guide*.

1.2 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:

- **`DIVAS_HOME`**: The Root Path on the file system where DIVArchive WS is installed (*Default:* ***`C:\DIVAS`***).
- **`DIVA_JAVA_HOME`**: The absolute directory path to the Java Runtime Environment (*JRE*) bin directory on the host.

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.

1.3 Definitions, Acronyms, and Special Terms

Table 1: Definitions, Acronyms, and Special Terms

Term	Definition
.7Z	A compression protocol that is used to compress a single file or multiple files for easy transfer as a single archived file.
API	Application Programming Interface
CRUD	Create, Read, Update and Delete (*CRUD*) are the four basic functions of persistent storage.
CygWin	A collection of tools providing a Linux look and feel environment for Windows.
Data Service	Web Services interface to the Database.
GUI	Graphical User Interface
HTTP	Hypertext Transfer Protocol
JVM	A Java Virtual Machine (*JVM*) is a virtual machine that can execute Java bytecode. It is the code execution component of the Java platform.
REST	Representational State Transfer. Style of software architecture for distributed hypermedia systems such as the World Wide Web.
SOA	Service-Oriented Architecture. Flexible set of design principles used during the phases of systems development and integration in computing. A system based on an 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. A 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.
SQL	Structured Query Language: Syntax that is used to interact directly with the database.
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 (***.xml***).

1.4 System Overview

The DIVAprotect Data Services (*WS*) API is based on modern development technologies and methodologies providing flexible, scalable, and powerful interactions with the DIVAprotect System using the WS standards.

The DIVAprotectWS Solution is implemented with the WSO2 Data Services feature of the DIVArchive Application Server. The main goal of the Data Service is to provide a WS interface to the DIVArchive Database. In the WSO2 Data Services the Data Services features are represented in an xml file having the **`.dbs`** extension; which contains SQL queries and describes WS interfaces to these queries.

There are no special licensing requirements to employ the DIVArchive WS API Solution.

The DIVAprotectWS API is a combination of two architectures:

- Simple Object Access Protocol (*SOAP*): An extensible protocol for exchanging structured messages using the Web Services Description Language (*WSDL*).
- Representative State Transfer (*REST*): Takes a different approach to SOAP and follows closely to the Create, Read, Update and Delete (*CRUD*) ideology rather than SOAP's extensibility.

The DIVAprotect Data Service employs methods to ensure the full functionality expected using the SOAP methodology and the RESTful syntax. The DIVAprotectWS API provides full CRUD functionality in addition to more advanced features available from both SOAP and RESTful implementations and is defined using the WSDL XML format. All of the definitions are contained in the WSDL file named **`DIVArchiveWS_SOA.wsdl`**.

DIVAprotectWS consists of two parts:

- The DIVArchive Application Server Platform (*version 1.1*).
- The DIVAprotect Data Services Application.

and is compatible with the following bindings and formats:

- SOAP
  - SOAP 1.1 and 1.2
  - WSDL 1.1
  - Bindings:
    - HTTP, SOAP 1.1, SOAP 1.2 (*no https*)
- REST
  - No WSDL required.
  - Bindings:
    - HTTP (*default*)
- WS-I
  - SOAP 1.1

1.5 Content Negotiation Support (JSON)

DIVArchive Application Server supports Content Negotiation.

- https://en.wikipedia.org/wiki/Content_negotiation

It is possible to ask the Server to receive and to send content of a specific MIME Type. Allowed content types are XML and JSON. This can be manipulated using the **Content Type** and **Accept HTTP Headers** for requests and responses accordingly.

The default **Content Type** *for* **XML** is **`application/xml`** in **UTF-8**.

Please use **`application/json/badgerfish`** as the **MIME Type** for **JSON** requests because the **MIME Type `application/json`** is not supported. Refer to the following specification links for questions related to **JSON Badgerfish**.

- http://www.sklar.com/badgerfish/
- http://badgerfish.ning.com/

2 Installation and Configuration

2.1 Prerequisites

The DIVArchive WS API has several requirements that must be met to allow interfacing with the DIVArchive System via Web Services:

- The standard DIVArchive prerequisites.
  - DIVAprotectWS is a component of DIVAS (*DIVAsymphony*) and requires proper installation before installation of DIVAprotectWS.
  - DIVAprotectWS can be installed on any machine regardless of whether or not DIVAprotect exists on the machine; however the standard DIVArchive prerequisite requirements must be met.
  - Refer to the *Oracle DIVArchive WS API Reference Manual*, or contact your Oracle Sales Support Specialist for standard prerequisites.
- Java Virtual Machine (*JVM*) 64-bit version 1.8.0_45-b14.
  - **`DIVA_JAVA_HOME`** must be defined before the installation.
- **`7Z`** and **`CygWin`** must be installed
  - Both programs are readily available on the internet.
    - http://www.7-zip.org/
    - http://www.cygwin.com

2.2 Configuration

If the configuration to be used in the DIVArchive System is the default, there is no need for additional configuration file changes.

If the system configuration IS NOT using the defaults do one of the following:

- Adjust the XML configuration file BEFORE installation (*use the process below*).
- Use the Embedded XML Editor (see 5.1) or the Data Service Editing Wizard (see 5.2) AFTER installation.

Default Configuration:

- Database Name: **`diva`**
- Username: **`diva`**
- Password: **`lib5`**
- IP Address: **`127.0.0.1`**
- Listener Port: **`1521`**

To configure the database connection manually before the Application Server is started, please edit the **.dbs** XML file located in:

<DIVAS_HOME>/components/DIVAprotectWS<major_version_number>/deployable/divaprotectWS.dbs

The **jdbc** connection parameters may be edited as shown below:

```
<config id="divab2ds">
  <property
   name="org.wso2.ws.dataservice.driver">oracle.jdbc.driver.OracleDriver</property>
  <property
   name="org.wso2.ws.dataservice.protocol">jdbc:oracle:thin:DIVA/lib5@127.0.0.1:1521:lib5</property>
  <property name="org.wso2.ws.dataservice.user">DIVA</property>
  <property name="org.wso2.ws.dataservice.password">lib5</property>
  <property name="org.wso2.ws.dataservice.validation_query">SELECT
   * FROM DPRT_METRICS</property>
  <property
   name="org.wso2.ws.dataservice.initial_size">1</property>
  <property name="org.wso2.ws.dataservice.maxpoolsize">3</property>
  <property name="org.wso2.ws.dataservice.minpoolsize">1</property>
</config>
```

2.2.1 Recommended Default Throttling Configuration

During installation and configuration, it is recommended that the default throttling settings should be established with a maximum of 200 concurrent sessions. Refer to Service Throttling Configuration to set the throttling parameters correctly. It is highly recommended to set the maximum concurrent connections to 200.

2.3 Installation

DIVAprotectWS is delivered as a component of DIVAS. The installation package for DIVAprotectWS is located at the following location:

DIVAS_HOME\components\DIVAprotectWS.<major_version_number>

Once installed, the following files and folders will be evident:

- **bin:** this folder contains the batch script files.
  - **DIVAS_HOME\bin\Setup.DIVAprotectWS.1.0.bat**
    - Script to configure and start **DIVAprotectWS.1.0** with the default configuration.
- **deployable**: this folder includes everything that will be deployed with the component (*dataservices.xml files*).
- DIVAS_HOME\components\DIVAprotectWS.1.0\
- DIVAS_HOME\components\DIVAprotectWS.1.0\bin\
- DIVAS_HOME\components\DIVAprotectWS.1.0\bin\operations.bat
  - All comments in **operations.bat** are accessible via the **divas.bat** script.
- DIVAS_HOME\components\DIVAprotectWS.1.0\bin\version.txt
- DIVAS_HOME\components\DIVAprotectWS.1.0\deployable\
- DIVAS_HOME\components\DIVAprotectWS.1.0\deployable\DIVAprotectWS.dbs

Note: It is possible to configure the DIVAprotect Database connection before the actual installation – refer to Configuration for details.

2.3.1 Using the Setup.DIVAprotectWS.1.0.bat Script

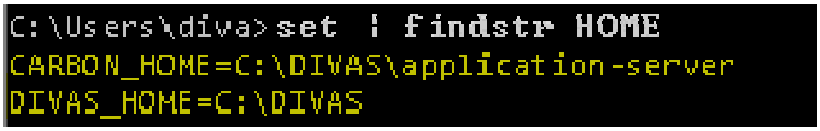
Using the **Setup.DIVAprotectWS.1.0.bat** script is the easiest way to install, configure, and check DIVAprotectWS 1.x. This batch file does not accept any additional parameters and executes the following actions in sequence:

1. Check that the Environment Variables have been set correctly using:

   set | findstr HOME

   This command is executed from the Windows System Command Window. The result should look like the figure below.

Figure 1: Check that the Environment Variables Installed Correctly



2. Deploys the DIVAprotectWS 1.x Data Service to the DIVAS Application Server.

3. Installs the DIVAS Application Server as a Windows Service.
4. Starts the DIVAS Application Server Service.
5. Executes the **`status`** command and prints out a detailed status report of the installation and started service.

Installation can also be completed using the following instructions:

1. Check that the Environment Variables have been set correctly using:

   `set | findstr HOME`

   This command is executed from the Windows System Command Window. The result should look like the figure below.

Figure 2: Check that the Environment Variables Installed Correctly

2. Deploy the component.

   `DIVAS_HOME\bin\divas.bat deploy DIVprotectWS.1.0`

   OR

   `DIVAS_HOME\bin\divas.bat deploy all`

3. Start the DIVArchive Application Server:

   `DIVAS_HOME\bin\divas.bat start`

To be sure that DIVAprotectWS is installed properly, open the Web Console and locate the list of running web services.

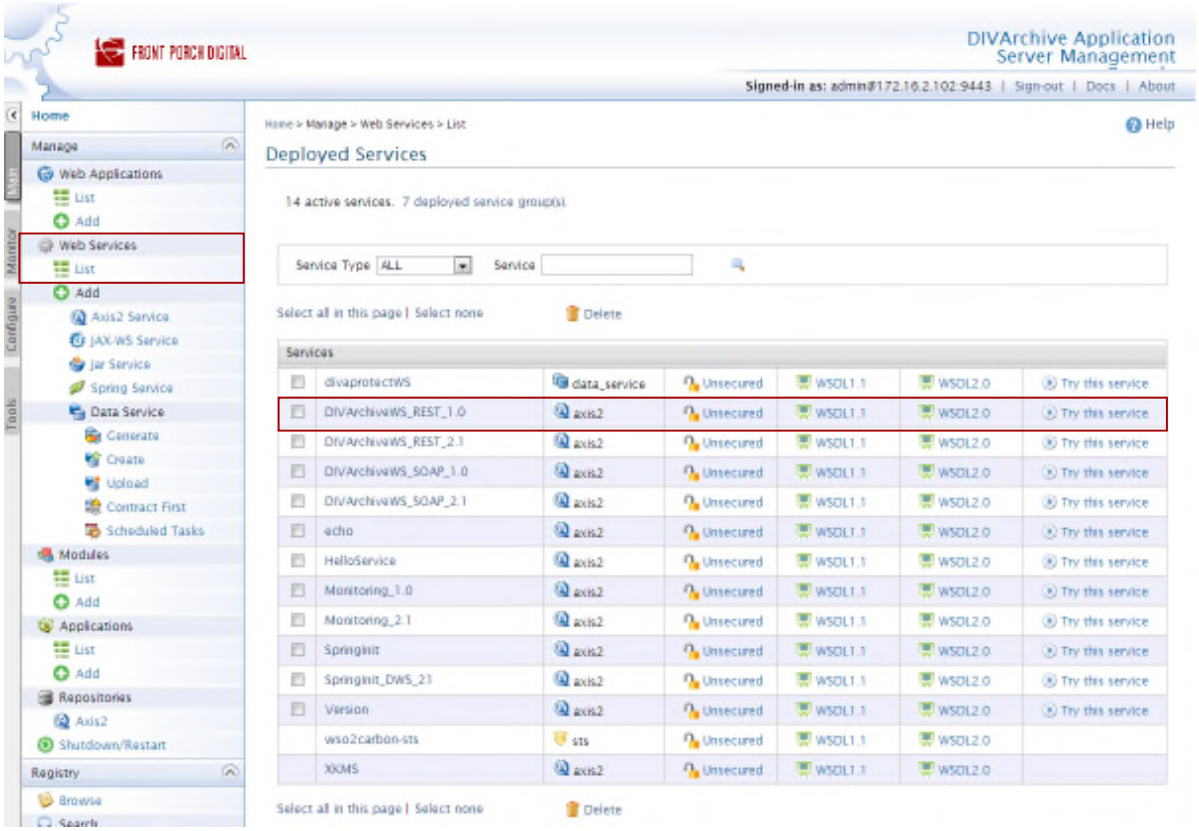
The Portal can be connected to using a web browser at the following URL:

`https://<IP Address of Application Server>:9443`

The default username and password are **`admin`** and **`admin`**.

1. Under **Web Services** click on the **List Menu Item**.
2. Check that **`divaprotectWS`** is running.

Figure 3: Check that the Data Service is Installed Correctly



3 Standard API Calls

3.1 Running Requests

SOAP:

Operation name:

_getrunning_requests

REST Request:

URL:

http://<host>:<port>/services/divaprotectWS.HTTPEndpoint/running_requests

Method: **GET**

1. **Accept: application/xml**
2. **Accept: application/json/badgerfish**

Synopsis

Returns all running requests.

Return Value:

Returns all running requests.

Description

Parameter	Description
RE_ID	**Long**: Number identifying the Request.
RE_SUBMISSION_DATE	**Int:** Date the request was submitted.
RE_COMPLETION_DATE	**Int:** Date the request was completed.
RE_TYPE	**String:** The type of request. • **Archive** = A • **Restore** = R • **Delete** = D • **AutomaticRepack** = P • **ManualRepack** = M

Parameter	Description
RE_TYPE (*continued*)	• **Insert** = I • **Eject** = E • **DeleteInstance** = L • **RestoreInstance** = T • **CopyToGroup** = C • **AssociativeCopy** = S • **PartialRestore** = O • **PartialRestoreInstance** = N • **MultipleRestore** = Y • **TranscodeArchived** = V • **CopyToNewObject** = B • **Export** = X • **Transfer** = F • **AutomaticVerifyTapes** = G • **ManualVerifyTapes** = H
RE_STATUS	**String:** Status of the request. • Pending = P • Running = R • Cancelled = X • Aborted = A • Completed = C • Recoverable = O • Partially Aborted = Y
RE_SOURCE_DEST_NAME_PARM	**String:** Name of the Source/Destination for the request.
RE_OBJECT_NAME_PARAMETER	**String:** Name of the Object to be archived.
RE_CATEGORY_PARAMETER	**String:** Category of the Object.
RE_GROUP_PARAMETER	**String:** Name of the Destination Group/Array/Storage.
RE_FILES_PATH_PARAMETER	**String:** Root directory for the files specified by the **filenamesList** parameter.

Parameter	Description
RR_FILES_LIST	**String:** The list of files and their relative path from **RE_FILES_PATH_PARAMETER** associated with the request.
RE_QOS_PARAMETER	The Quality of Service Level for the Archive and Restore request. • 0 = **DIVA_QOS_DEFAULT** o Restoring is performed according to the default Quality Of Service (currently: direct and cache for archive operations Nearline, and direct for restore operations). • 1 = **DIVA_QOS_CACHE_ONLY** o Use Cache Restore only. • 2 = **DIVA_QOS_DIRECT_ONLY** o Use Direct Restore only. • 3 = **DIVA_QOS_DIRECT_AND_CACHE** o Use Direct Restore if available or Cache Restore if Direct Restore is not available. • 4 = **DIVA_QOS_CACHE_AND_DIRECT** o Use Cache Restore if available or Direct Restore if Cache Restore is not available. • 5 = **DIVA_QOS_NEARLINE_ONLY** o Use Nearline only. • 6 = **DIVA_QOS_NEARLINE_AND_DIRECT** o Use Nearline if available or Direct if Nearline is not available.
RE_PRIORITY_PARAMETER	**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.
RE_COMMENTS_PARAMETER	**String:** Optional information describing the Object (*can be a null string*).

Parameter	Description
RE_OPTIONS_PARAMETER	**String:** Additional options that were used for performing the request. 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.
RE_TAPE_PARAMETER	**String:** Source tape barcode associated with the request.
RE_TAPE_DESTINATION	**String:** Destination tape barcode associated with the request.
RE_ERRORS_ASSOCIATED	**String:** Identifies whether errors occurred during the request. • Y = Yes • N = No
RE_INSTANCE_ID	**Int:** Instance Identifier of the Object associated with the request.
RE_ADD_SERVICES_PARAMETER	**Int:** • **DO_NOT_OVERWRITER_POLICY** = 0 • **DO_NOT_CHECK_EXISTENCE_POLICY** = 1 • **DELETE_AND_REWRITE_POLICY** = 2

Parameter	Description
RE_PARTIAL_RESTR_FMT_PARM	**Int:** Value of the video format. • **DIVA_FORMAT_BYTES** o Offsets must be given as byte offsets. • **DIVA_FORMAT_BYTES_HEADER** o Deprecated, left for compatibility purposes only. • **DIVA_FORMAT_VIDEO_GXF** o Offsets must be given as time codes. o The file to be partially restored is expected to be in GXF format. o The **fileList** vector parameter is expected to contain only one **dwsm:DivaOffsetSourceDest** element as well as the **offsetVector** vector, which is expected to contain only one **dwsm:DivaOffsetPair** element. o Only the **DIVA_QOS_DIRECT_ONLY** Quality Of Service is supported for this format. • **DIVA_FORMAT_VIDEO_SEA**: o Offsets must be given as time codes. o The file to be partially restored is expected to be in SAF format and provide an index file. • **DIVA_FORMAT_VIDEO_AVI_MATROX:** o Offsets must be given as time codes. o The file list parameter must describe one or several clip parts to be restored. Each part description must meet the following constraints: o A part description starts with exactly one **dwsm:DivaOffsetSourceDest** structure for an AVI file. o The source filename must have the .avi or .AVI extension. o This structure's **offsetVector** must contain exactly one **dwsm:DivaOffsetPair** structure with the time code pair to be restored. o A part description then contains one **dwsm:DivaOffsetSourceDest** structure for each WAV file of the clip (*there must be at least one WAV file per clip part*).

Parameter	Description
RE_PARTIAL_RESTR_FMT_PARM (*continued*)	o Each structure must contain exactly one **dwsm:DivaOffsetPair** structure with a time code pair equal to the time code pair associated with the AVI file. o The next part is delimited by the first **dwsm:DivaOffsetSourceDest** structure associated with an AVI file. ▪ The Destination Server must support the successive restore of each part, with the AVI file (*without WAV file*) and then of the WAV files (*all at once in the same connection*). • **DIVA_FORMAT_VIDEO_MPEG2_TS**: o Offsets must be given as time codes. o Video file must be encoded using the MPEG2 Transport Stream format. Use this for VELA encoders. • **DIVA_FORMAT_VIDEO_MXF**: o Offsets must be given as time codes. o The file format expected by this type of Oracle Partial File Restore is a single MXF file. A detailed matrix of supported MXF files is given in the product description. • **DIVA_FORMAT_VIDEO_PINNACLE**: o Offsets must be given as time codes. o This Partial File Restore format expects a specific object structure. It is applicable to Pinnacle clips composed of three files, header, ft and std. The MSS Source/Destination Type is preferred to create this clip with DIVArchive. ▪ The **fileList** vector parameter is expected to contain only one **dwsm:DivaOffsetSourceDest** element, as well as the **offsetVector** vector, which is expected to contain only one **dwsm:DivaOffsetPair** element. The **dwsm:DivaOffsetSourceDest** element must be associated with the header file only. The Destination Name is also the header. • **DIVA_FORMAT_VIDEO_OMNEON**: ▪ Offsets must be given as time codes.

Parameter	Description
RE_PARTIAL_RESTR_FMT_PARM (*continued*)	○ This type of Partial File Restore can be used to partially restore Quicktime files (*referenced and self-contained clips are supported*). A detailed matrix of supported Quicktime clips is given in the product description. ○ The **fileList** vector parameter is expected to contain only one **dwsm:DivaOffsetSourceDest** element as well as the **offsetVector** vector, which is expected to contain only one **dwsm:DivaOffsetPair** element. The **dwsm:DivaOffsetSourceDest** 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 ▪ Seachange (*The .pd file must be in the first position*)

Parameter	Description
RE_PARTIAL_RESTR_FMT_PARM (*continued*)	▪ The **fileList** vector parameter is expected to contain only one **dwsm:DivaOffsetSourceDest** element as well as the **offsetVector** vector, which is expected to contain only one **dwsm:DivaOffsetPair** element. ▪ The **dwsm:DivaOffsetSourceDest** 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. **/** Simple byte offset partial restore */** **public static final int FORMAT_BYTES = 1;** **/** Byte offset partial restore with duplicated header optimization */** **public static final int FORMAT_BYTES_HEADER = 2;** **/** GXF video format partial restore */** **public static final int FORMAT_VIDEO_GXF = 3;** **/** Seachange video format partial restore */** **public static final int FORMAT_VIDEO_SEA = 4;** **/** AVI-Matrox video format partial restore */** **public static final int FORMAT_VIDEO_AVI_MATROX = 5;** **/** WAV-PCM audio format partial restore */** **public static final int FORMAT_AUDIO_WAV_PCM = 6;** **/** MPEG2-TS video format partial restore */** **public static final int FORMAT_VIDEO_MPEG2_TS = 7;** **/** MXF video format partial restore */** **public static final int FORMAT_VIDEO_MXF = 8;** **/** Pinnacle video format partial restore */** **public static final int FORMAT_VIDEO_PINNACLE = 9;** **/** Omneon video format partial restore */** **public static final int FORMAT_VIDEO_OMNEON = 10;** **/** Omneon video format partial restore */** **public static final int FORMAT_VIDEO_QUANTEL = 11;** **/** Leitch exchange format partial restore (LXF) */** **public static final int FORMAT_VIDEO_LEITCH = 12;**

Parameter	Description
RE_ADDITIONAL_INFO	The **additionalInfo** field may contain one or more of the following, depending upon the request type" • MOB ID • XML Document • 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. • Clip ID
RE_THIRDPARTY_ID	**Int**: Identification number of any third party applications associated with the request.

Response Samples:

1. **Content-Type: application/xml;charset=UTF-8**

```
<DP_RUNNING_REQUEST_VIEWCollection
  xmlns="com.fpdigital.ds.divaprotect.ws">
   <DP_RUNNING_REQUEST_VIEW>
     <RE_ID>621</RE_ID>
     <RE_SUBMISSION_DATE>2012-12-17T22:19:11.000-05:00</RE_SUBMISSION_DATE>
     <RE_COMPLETION_DATE xmlns:xsi="http://www.w3.org/2001/XMLSchema-
      instance" xsi:nil="true"/>
     <RE_TYPE>A</RE_TYPE>
     <RE_STATUS>P</RE_STATUS>
     <RE_SOURCE_DEST_NAME_PARM>ftp_001</RE_SOURCE_DEST_NAME_PARM>
     <RE_OBJECT_NAME_PARAMETER>cricket3</RE_OBJECT_NAME_PARAMETER>
     <RE_CATEGORY_PARAMETER>skusports</RE_CATEGORY_PARAMETER>
     <RE_GROUP_PARAMETER>default</RE_GROUP_PARAMETER>
     <RE_FILES_PATH_PARAMETER/>
     <RR_FILES_LIST>test30Mbiber.mxf</RR_FILES_LIST>
     <RE_QOS_PARAMETER>DIRECT_AND_CACHE</RE_QOS_PARAMETER>
     <RE_PRIORITY_PARAMETER>50</RE_PRIORITY_PARAMETER>
     <RE_COMMENTS_PARAMETER/>
     <RE_OPTIONS_PARAMETER/>
     <RE_TAPE_PARAMETER/>
     <RE_TAPE_DESTINATION/>
     <RE_ERRORS_ASSOCIATED>N</RE_ERRORS_ASSOCIATED>
     <RE_INSTANCE_ID>-1</RE_INSTANCE_ID>
     <RE_ADD_SERVICES_PARAMETER>0</RE_ADD_SERVICES_PARAMETER>
     <RE_PARTIAL_RESTR_FMT_PARM>-1</RE_PARTIAL_RESTR_FMT_PARM>
     <RE_ADDITIONAL_INFO xmlns:xsi="http://www.w3.org/2001/XMLSchema-
      instance" xsi:nil="true"/>
```

```
    <RE_THIRDPARTY_ID xmlns:xsi="http://www.w3.org/2001/XMLSchema-
     instance" xsi:nil="true"/>
  </DP_RUNNING_REQUEST_VIEW>
  <DP_RUNNING_REQUEST_VIEW>
    <RE_ID>622</RE_ID>
    <RE_SUBMISSION_DATE>2012-12-17T22:19:11.000-05:00</RE_SUBMISSION_DATE>
    <RE_COMPLETION_DATE xmlns:xsi="http://www.w3.org/2001/XMLSchema-
     instance" xsi:nil="true"/>
    <RE_TYPE>A</RE_TYPE>
    <RE_STATUS>P</RE_STATUS>
    <RE_SOURCE_DEST_NAME_PARM>ftp_001</RE_SOURCE_DEST_NAME_PARM>
    <RE_OBJECT_NAME_PARAMETER>cricket4</RE_OBJECT_NAME_PARAMETER>
    <RE_CATEGORY_PARAMETER>skusports</RE_CATEGORY_PARAMETER>
    <RE_GROUP_PARAMETER>default</RE_GROUP_PARAMETER>
    <RE_FILES_PATH_PARAMETER/>
    <RR_FILES_LIST>test30Mbiber.mxf</RR_FILES_LIST>
    <RE_QOS_PARAMETER>DIRECT_AND_CACHE</RE_QOS_PARAMETER>
    <RE_PRIORITY_PARAMETER>50</RE_PRIORITY_PARAMETER>
    <RE_COMMENTS_PARAMETER/>
    <RE_OPTIONS_PARAMETER/>
    <RE_TAPE_PARAMETER/>
    <RE_TAPE_DESTINATION/>
    <RE_ERRORS_ASSOCIATED>N</RE_ERRORS_ASSOCIATED>
    <RE_INSTANCE_ID>-1</RE_INSTANCE_ID>
    <RE_ADD_SERVICES_PARAMETER>0</RE_ADD_SERVICES_PARAMETER>
    <RE_PARTIAL_RESTR_FMT_PARM>-1</RE_PARTIAL_RESTR_FMT_PARM>
    <RE_ADDITIONAL_INFO xmlns:xsi="http://www.w3.org/2001/XMLSchema-
     instance" xsi:nil="true"/>
    <RE_THIRDPARTY_ID xmlns:xsi="http://www.w3.org/2001/XMLSchema-
     instance" xsi:nil="true"/>
  </DP_RUNNING_REQUEST_VIEW>
</DP_RUNNING_REQUEST_VIEWCollection>
```

2. **Content-Type:application/json/badgerfish;charset=UTF-8**

```
{" DP_RUNNING_REQUEST_VIEWCollection":{
  "@xmlns":{"$":"com.fpdigital.ds.divaprotect.ws"}}
}
```

3.2 Metric Information

SOAP:

Operation Name:

`_getmetric_infos`

REST Request:

URL:

http://<host>:<port>/services/divaprotectWS.HTTPEndpoint/metric_infos

Method: `GET`

1. **`Accept: application/xml`**
2. **`Accept: application/json/badgerfish`**

Synopsis

Returns all defined metrics in the DIVArchive System.

Description

Parameter	Description
`METRIC_ID`	**Long**: Number identifying the metric.
`METRIC_NAME`	**String**: The name of the metric.
`COLLECTION_TYPE`	**String**: Collection Type Name: • AVG = Average • MAX = Maximum • MIN = Minimum
`WEIGHT_FACTOR`	**String**: The field used as the weight factor for the metric being collected. (*Can be NULL if not applicable).*
`COLLECTION_FIELD`	**String**: The name of the field that was collected.
`COLLECTION_DATATYPE`	**Int**: The type of data that was collected: • 1 = Metrics collected are of Number Data Type. • 2 = Metrics collected are of Date Data Type.

Parameter	Description
AGGREGATION_FIELD	**String**: The field used to aggregate the metric being collected.
COLLECTION_INTERVAL_HOURS	**Int**: The time span used to collect the metric. Valid values are 1 through 24.
STORAGE_INTERVAL	**Int**: This feature is not currently implemented and is defined for future use.
STORAGE_INTERVAL_UNIT	**String**: This feature is not currently implemented and is defined for future use.
INITIAL_VALUE	**String**: The initial value of the metric when collection started.
ENABLED	**String**: Whether or not the collection for this metric was enabled. • Y = Yes • N = No

Sample Request:

```
</body>
```

Response Samples:

1. **Content-Type:application/xml;charset=UTF-8**

```
<DPRT_METRIC_INFOS_VIEWCollection
 xmlns="com.fpdigital.ds.divaprotect.ws">
  <DPRT_METRIC_INFOS_VIEW>
    <METRIC_ID>1</METRIC_ID>
    <METRIC_NAME>TAPE_DRIVE_DATA_RATE</METRIC_NAME>
    <COLLECTION_TYPE>AVG</COLLECTION_TYPE>
    <WEIGHT_FACTOR xmlns:xsi="http://www.w3.org/2001/XMLSchema-
     instance" xsi:nil="true"/>
    <COLLECTION_FIELD>EV_TRANSFER_RATE</COLLECTION_FIELD>
    <COLLECTION_DATATYPE>1</COLLECTION_DATATYPE>
    <AGGREGATION_FIELD>EV_DRIVE_SERIAL_NUMBER</AGGREGATION_FIELD>
    <COLLECTION_INTERVAL_HOURS>24</COLLECTION_INTERVAL_HOURS>
    <STORAGE_INTERVAL>3</STORAGE_INTERVAL>
    <STORAGE_INTERVAL_UNIT>Y</STORAGE_INTERVAL_UNIT>
    <INITIAL_VALUE xmlns:xsi="http://www.w3.org/2001/XMLSchema-
     instance" xsi:nil="true"/>
    <ENABLED>Y</ENABLED>
  </DPRT_METRIC_INFOS_VIEW>
</DPRT_METRIC_INFOS_VIEWCollection>
```

2. **Content-Type:application/json/badgerfish;charset=UTF-8**


```
{
"DPRT_METRIC_INFOS_VIEWCollection":
{"@xmlns":{"$":"com.fpdigital.ds.divaprotect.ws"},
"DPRT_METRIC_INFOS_VIEW":
[{"METRIC_ID":{"$":"1"},
"METRIC_NAME":{"$":"TAPE_DRIVE_DATA_RATE"},
"COLLECTION_TYPE":{"$":"AVG"},
"WEIGHT_FACTOR":{
"@xmlns":
{"xsi":"http:\/\/www.w3.org\/2001\/XMLSchema-
instance"},"@xsi:nil":"true"},
"COLLECTION_FIELD":{"$":"EE_TRANSFER_RATE"},
"COLLECTION_DATATYPE":{"$":"1"},
"AGGREGATION_FIELD":{"$":"EE_DRIVE_SERIAL_NUMBER"},
"COLLECTION_INTERVAL_HOURS":{"$":"24"},
"STORAGE_INTERVAL":{"$":"3"},
"STORAGE_INTERVAL_UNIT":{"$":"Y"},
"INITIAL_VALUE":{
"@xmlns":
{"xsi":"http:\/\/www.w3.org\/2001\/XMLSchema-
instance"},"@xsi:nil":"true"},
"ENABLED":{"$":"Y"}}
]}
}
```

3.3 Metric Data

SOAP:

Operation Name:

`_getmetric_data`

REST Request:

URL:

`http://<host>:<port>/services/divaprotectWS.HTTPEndpoint/metric_data`

Method: `GET`

1. `Accept: application/xml`
2. `Accept: application/json/badgerfish`

Synopsis

Returns metric data values for the requested resource during the specified time range.

Description

Variable	Description
`r_page`	Number of pages of result.
`r_size`	Size of pages of result.
`metric_id`	ID of metric from metric information.
`metric_start_time`	Start Time of metric result.
`metric_end_time`	End Time of metric result.
`metric_resource`	Name of metric resource.

Sample Request:

```
<p:_getmetric_data xmlns:p="com.fpdigital.ds.divaprotect.ws">
  <!--0 to 1 occurrence-->
  <xs:r_page xmlns:xs="com.fpdigital.ds.divaprotect.ws">1</xs:r_page>
  <!--0 to 1 occurrence-->
  <xs:r_size xmlns:xs="com.fpdigital.ds.divaprotect.ws">10</xs:r_size>
  <!--0 to 1 occurrence-->
  <xs:metric_id
   xmlns:xs="com.fpdigital.ds.divaprotect.ws">127</xs:metric_id>
  <!--0 to 1 occurrence-->
  <xs:metric_start_time
   xmlns:xs="com.fpdigital.ds.divaprotect.ws">2012-12-
   13</xs:metric_start_time>
  <!--0 to 1 occurrence-->
  <xs:metric_end_time xmlns:xs="com.fpdigital.ds.divaprotect.ws">2012-
   12-14</xs:metric_end_time>
  <!--0 to 1 occurrence-->
  <xs:metric_resource
   xmlns:xs="com.fpdigital.ds.divaprotect.ws">actor_001_std</xs:metric
   _resource>
</p:_getmetric_data>
```

Response Description

Parameter	Description
ID	**Long**: Number identifying the metric.
METRIC_ID	**Long**: Number identifying the metric definition.
METRIC_RESOURCE_NAME	**String**: The name of the resource used to collect the metric.
METRIC_START_DATE	**Int**: The date and time the metric started being collected. The format is: YYYY-MM-DDTHH:MM:SS.000-05:00
METRIC_VALUE	**Int**: The value returned from the collection of the metric data.

Parameter	Description
METRIC_VALUE_UNIT	**String**: The value of the metric data: • BYTE • MB • GB • Can be NULL if not applicable.
EVENTS_COUNT	**Int**: The number of time the metric was sampled.
METRIC_CURRENT_INTERVAL_HOURS	**Int**: The time span used for collecting metric data. Valid values are -1 – 8760. • -1: Life Time Metric • 1: Hourly Metric • 24: Day Metric • 720: Monthly Metric • 8760: Yearly Metric.
METRIC_AGGREGATION_FIELD	**String**: The field used to aggregate the metric being collected.
METRIC_COLLECTION_FIELD	**String**: The name of the field that was collected.
METRIC_LAST_UPDATE	Int: The last time the metric data was updated. The format is: YYYY-MM-DDTHH:MM:SS.000-05:00

Response Samples:

1. **Content-Type:application/xml;charset=UTF-8**

```
<DPRT_METRIC_DATA_VIEWCollection
  xmlns="com.fpdigital.ds.divaprotect.ws">
   <DPRT_METRIC_DATA_VIEW>
     <ID>9266</ID>
     <METRIC_ID>127</METRIC_ID>
     <METRIC_RESOURCE_NAME>actor_001_std</METRIC_RESOURCE_NAME>
     <METRIC_START_DATE>2012-12-14T00:00:00.000-05:00</METRIC_START_DATE>
     <METRIC_VALUE>18168791040</METRIC_VALUE>
```

```
    <METRIC_VALUE_UNIT>BYTES</METRIC_VALUE_UNIT>
    <EVENTS_COUNT>228</EVENTS_COUNT>
    <METRIC_CURRENT_INTERVAL_HOURS>24</METRIC_CURRENT_INTERVAL_HOURS>
    <METRIC_AGGREGATION_FIELD>EV_ACTOR_NAME</METRIC_AGGREGATION_FIELD>
    <METRIC_COLLECTION_FIELD>EV_TRANSFER_SIZE</METRIC_COLLECTION_FIELD>
    <METRIC_LAST_UPDATE>2012-12-14T15:15:04.000-05:00</METRIC_LAST_UPDATE>
  </DPRT_METRIC_DATA_VIEW>
</DPRT_METRIC_DATA_VIEWCollection>
```

2. **Content-Type:application/json/badgerfish;charset=UTF-8**

```
{"DPRT_METRIC_DATA_VIEWCollection":{"@xmlns":{"$":"com.fpdigital.ds
.divaprotect.ws"}}}
```

4 Custom API Calls

It is possible to add custom API calls to the DIVAprotectWS API using SQL queries providing the required functionality. **The addition of custom API calls must be performed by Oracle personnel only**.

5 DIVAprotectWS Fine-Tuning

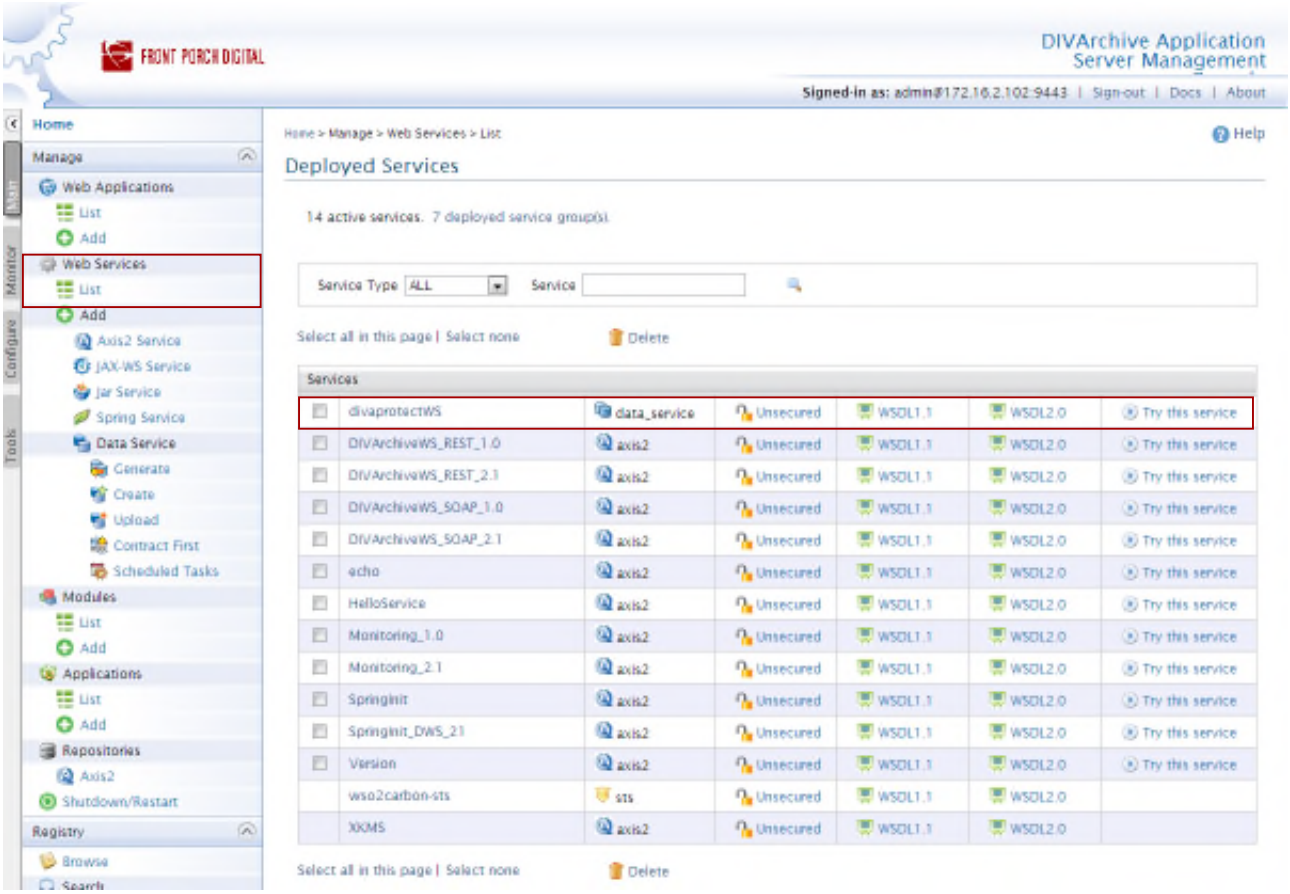
By default DIVAprotectWS is preconfigured to use the DIVAprotect Database located at the IP Address **`127.0.0.1`**. The default database name is **`DIVA`**. However, the connection can be fine-tuned using the Embedded XML Editor, or using the Data Service Editing Wizard. Refer to the subsections below for details on using each method.

5.1 Embedded XML Editor

The XML file can be edited during runtime using the **Embedded XML Editor** by following these instructions:

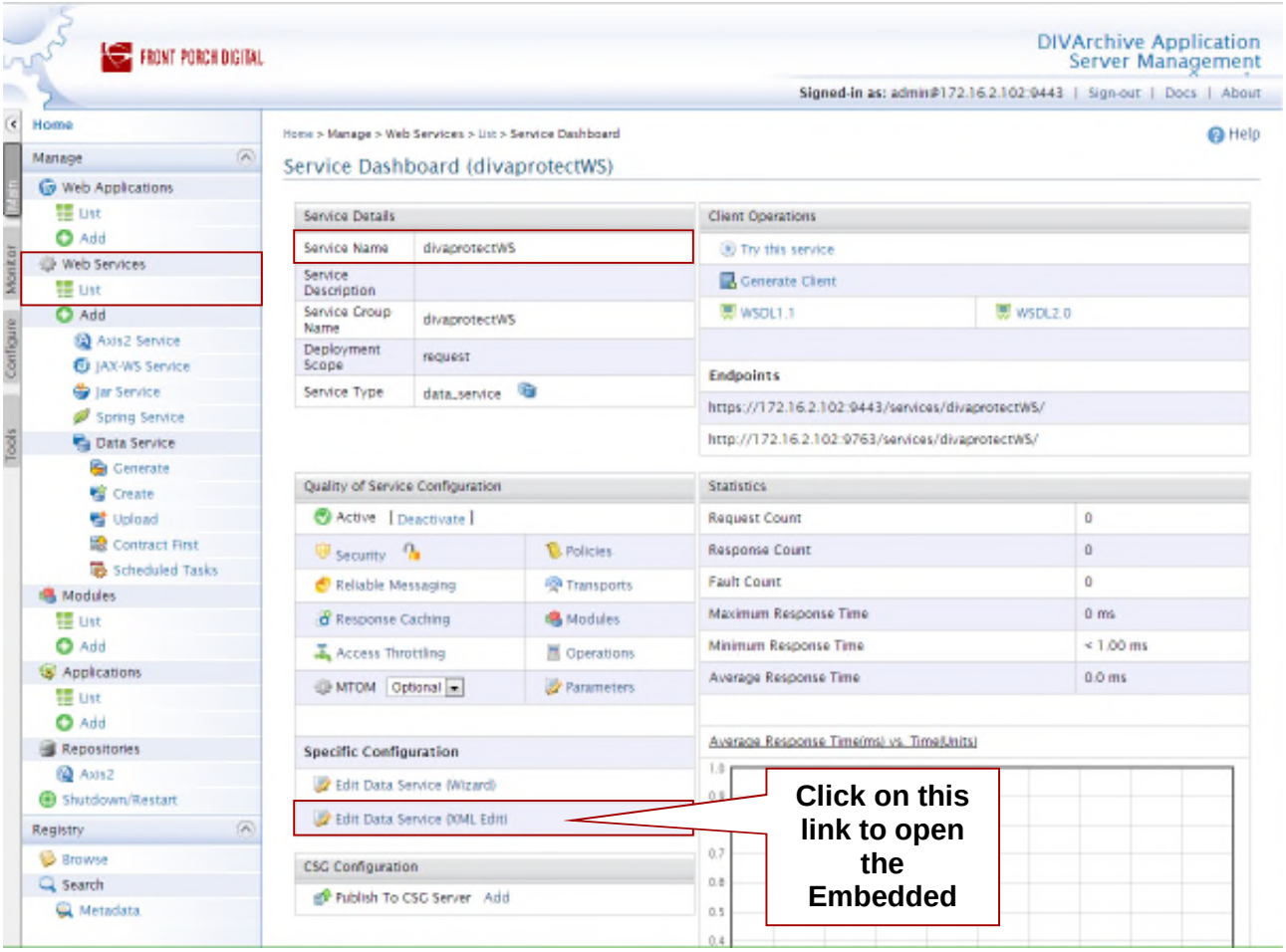
1. Connect to the **DIVArchive Application Server Management Console**.
2. Under **Web Services** click on the **List Menu Item**.

Figure 4: Web Services – Deployed Services List



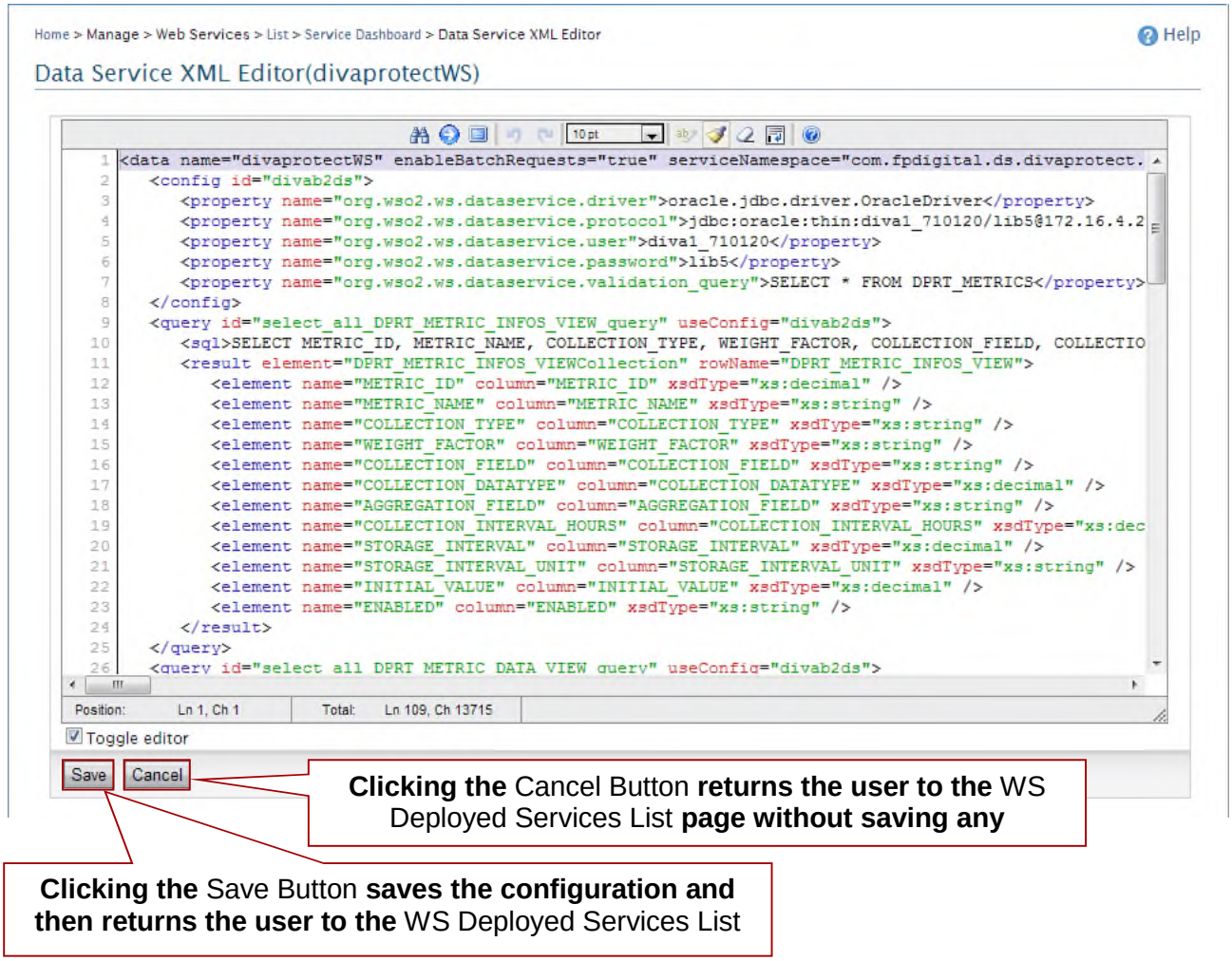
3. Click on **`divaprotectWS`**. The screen in the figure below will appear.
4. Click on **Edit Data Service (XML Edit)**.

Figure 5: Editing the XML File with the Embedded XML Editor



5. Edit the configuration in the **Embedded XML Editor** and click the **Save Button** to save the updated file.

Figure 6: Embedded XML Editor Screen

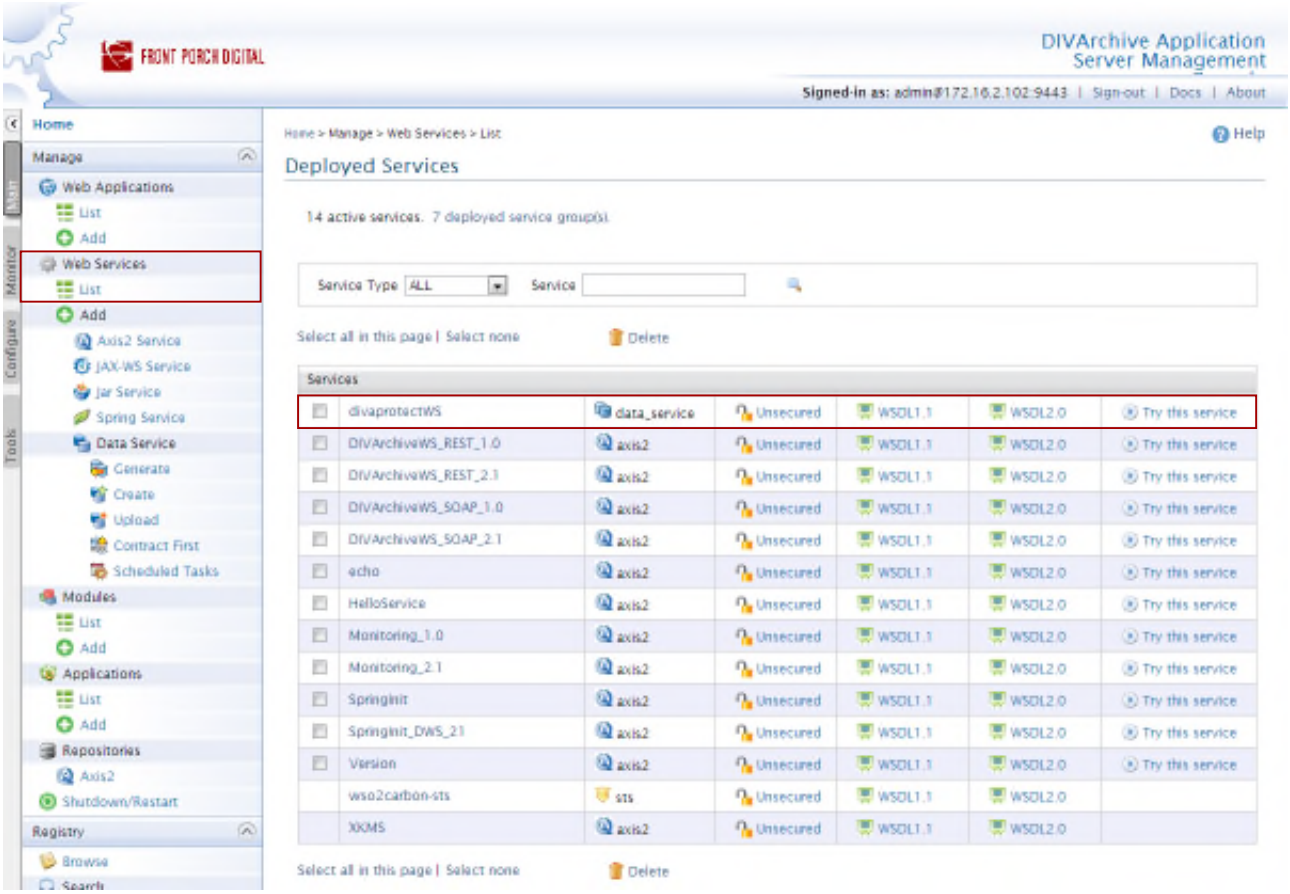


5.2 Data Service Editing Wizard

To edit the configuration using the **Data Service Editing Wizard**:

1. Connect to the **DIVArchive Application Server Management Console**.
2. Under **Web Services** click on the **List Menu Item**.

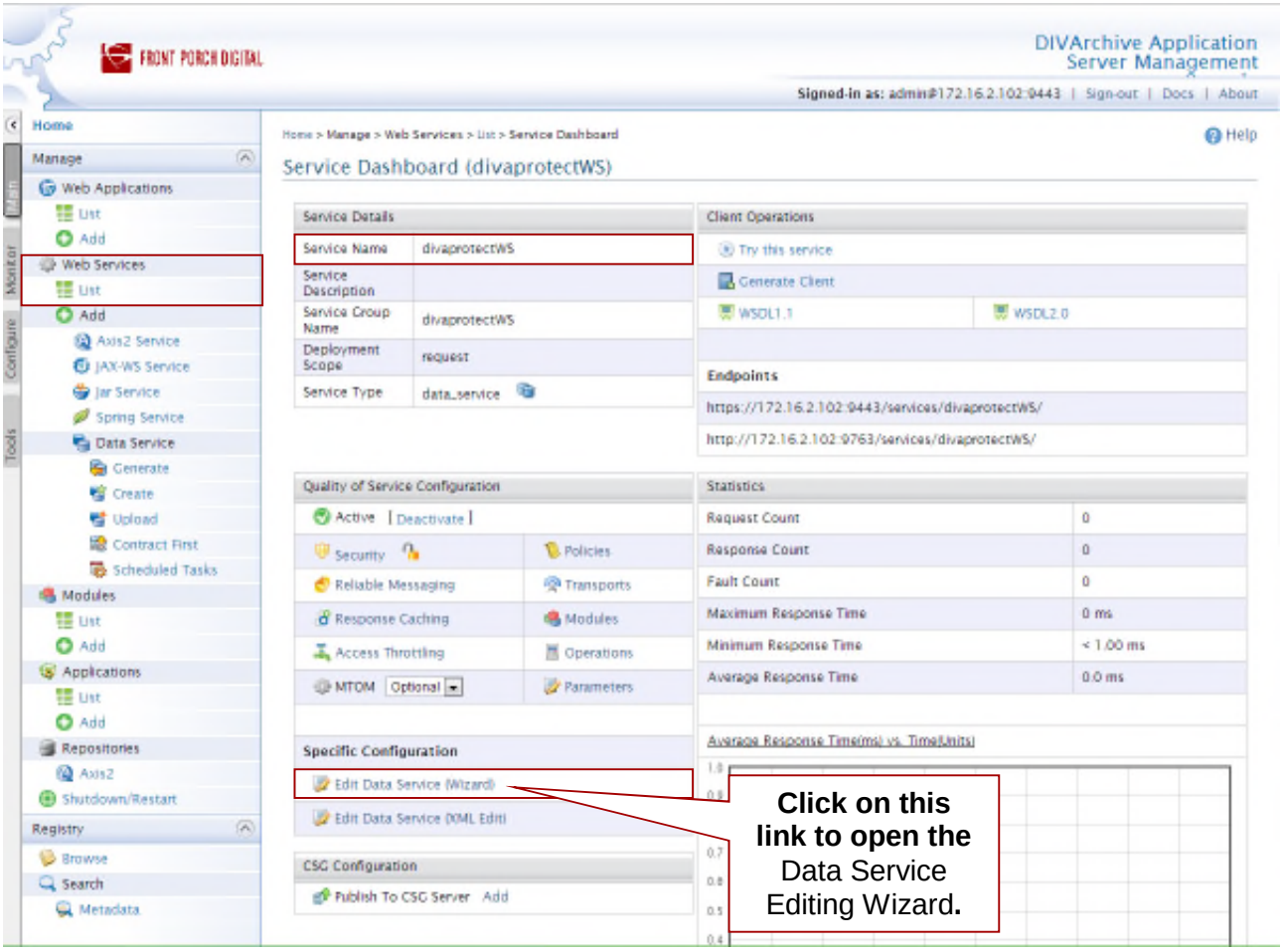
Figure 7: Web Services – Deployed Services List



3. Click on **`divaprotectWS`**.

4. Click on **Edit Data Service (Wizard)**.

Figure 8: Using the Data Service Wizard



5. When the Wizard starts, click the **Next Button** until the **Data Sources** step is displayed.

Figure 9: Data Service Wizard – Screen 1

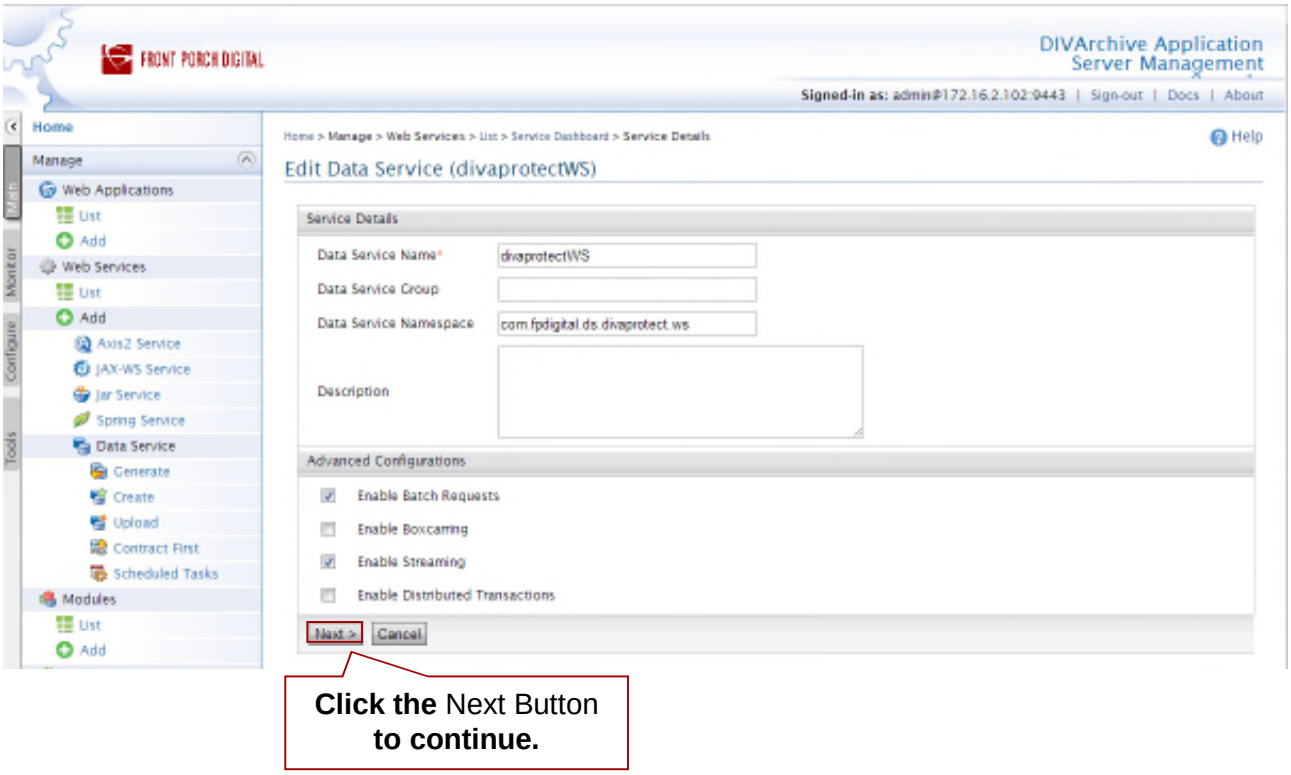
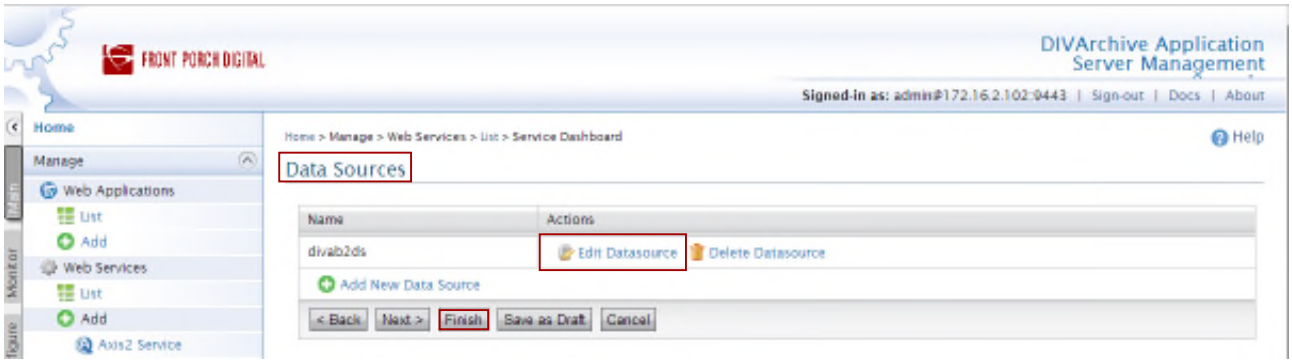
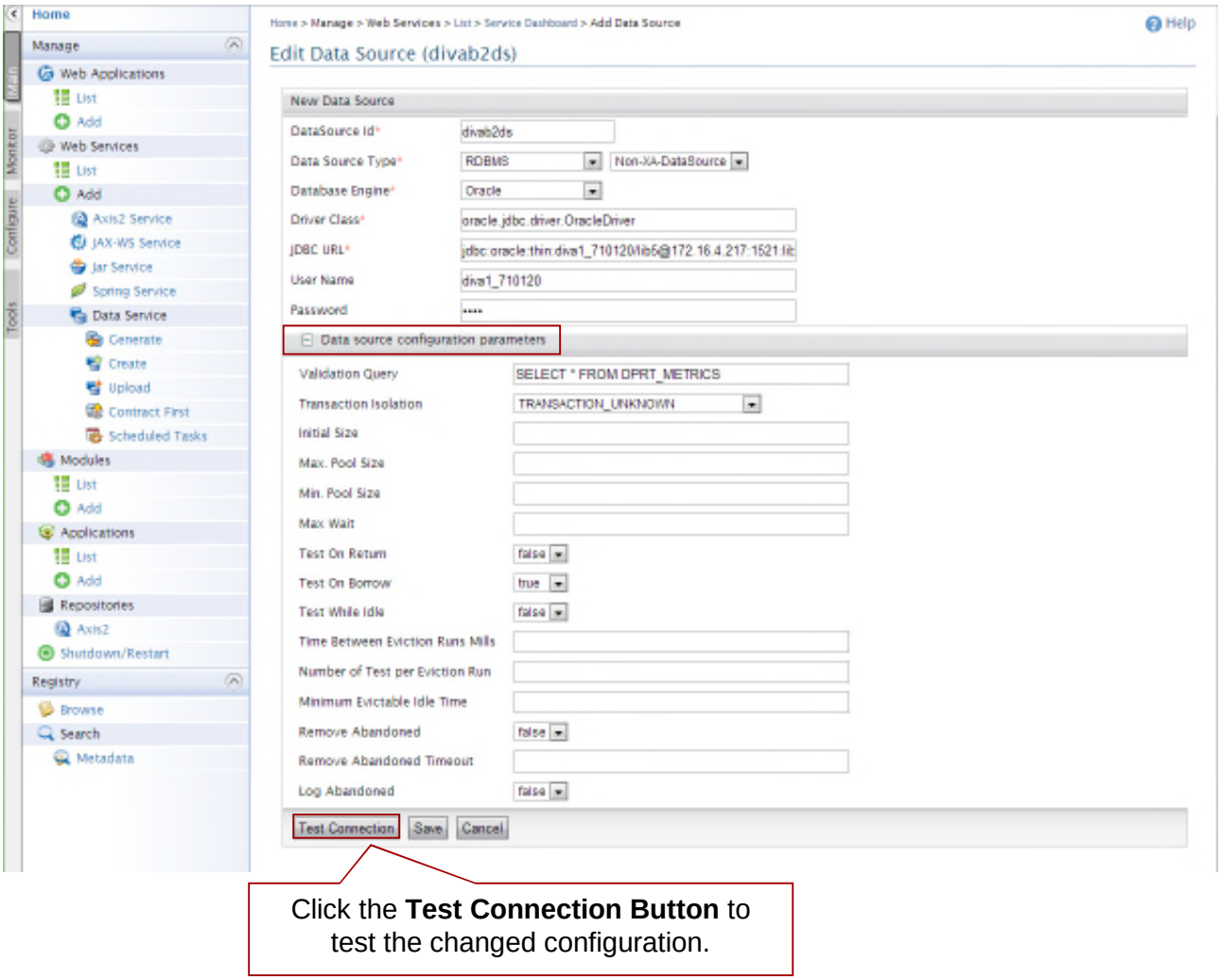


Figure 10: Data Service Wizard Data Sources Screen



6. As shown in the figure above, click **Edit Datasource**. The screen in the figure below will be displayed. Use the **+ Button** to expand the lower portion of the screen – by default it is collapsed and once expanded the button will turn to a **– Button** (*minus sign*).

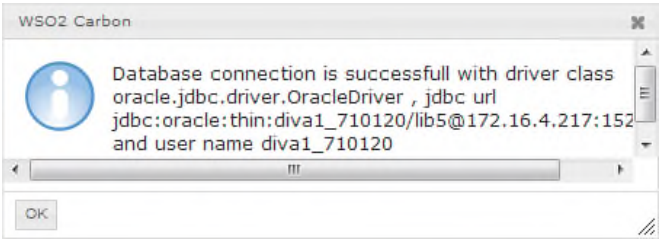
Figure 11: Edit Data Source Screen



Click the **Test Connection Button** to test the changed configuration.

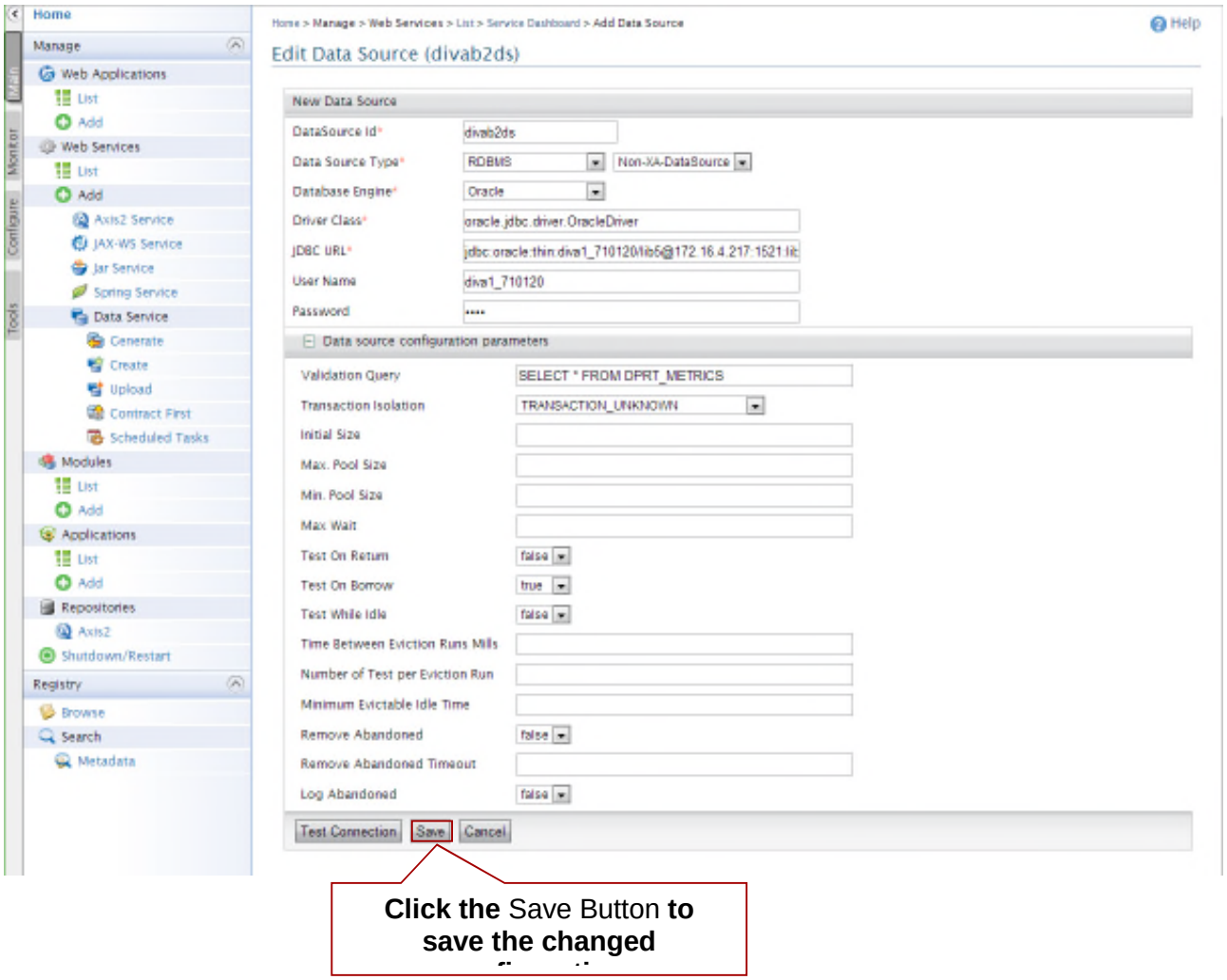
7. Test the changes using the **Test Connection Button**. A popup window will appear containing the results of the test.

Figure 12: Tested Connection Results Popup Window



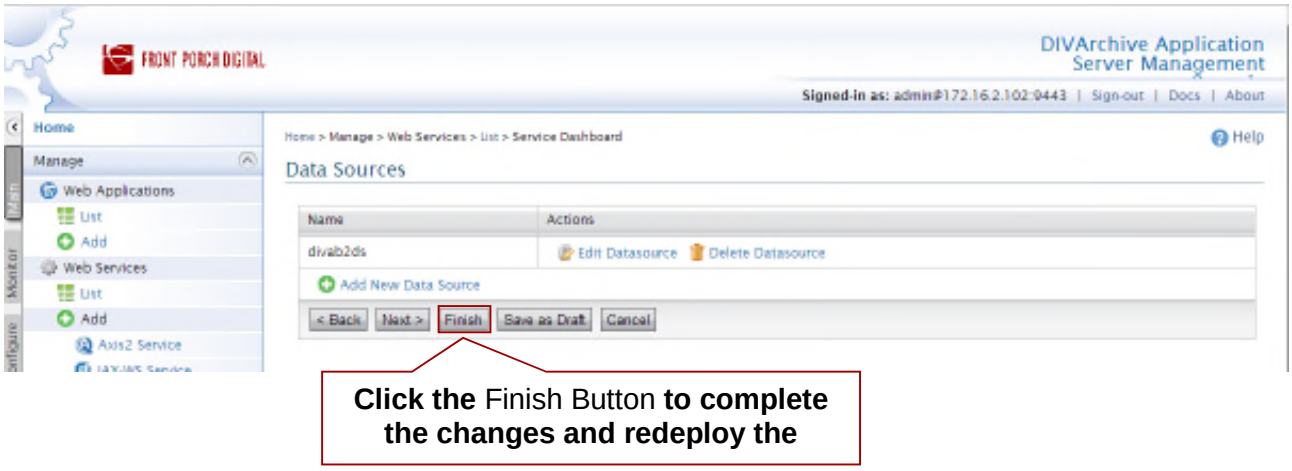
8. After a successful test of the changed configuration, click the **Save Button** to save the new configuration.

Figure 13: Saving the New Data Source Configuration



9. Once the configuration changes have been saved, click on the **Finish Button**.

Figure 14: Complete the Changes and Redeploy the Service



10. Wait for the Data Services to be redeployed - approximately 1-2 minutes.

5.3 Service Throttling Configuration

Limiting the number of simultaneously users accessing the service is allowed by using a **Throttling Configuration**. This configuration of the Data Service can is accomplished using the **Throttling Wizard** using the following procedure:

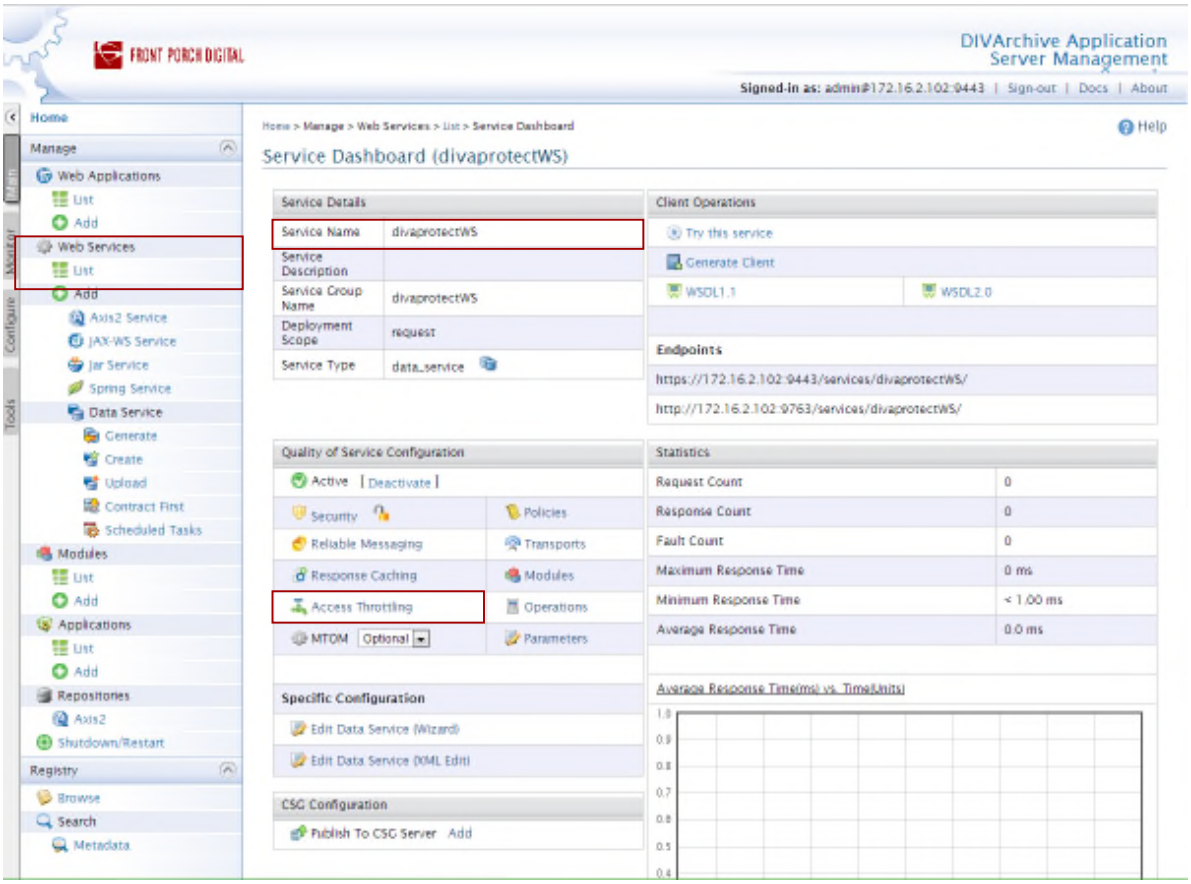
Notes:

Refer to WSO2 Throttling Configuration Manual for more information: http://wso2.org/library/articles/wso2-throttling.

Refer to the *Oracle DIVArchive WS API User Manual* and the *Oracle DIVArchive WS API Reference Manual* for more information about using DIVArchive WS API.

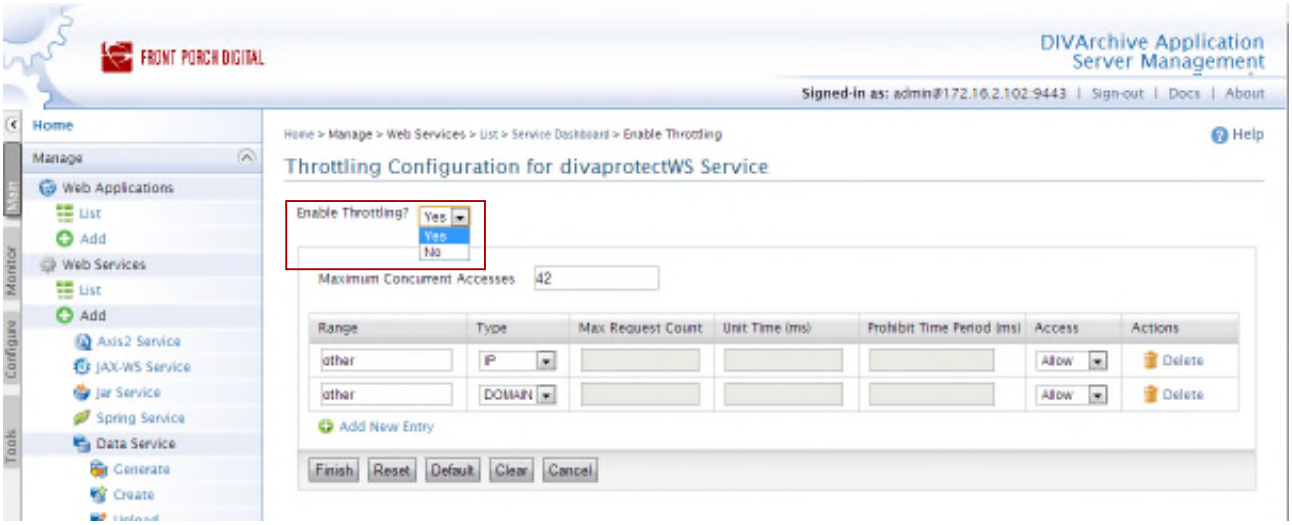
1. Connect to the **DIVArchive Application Server Management Console**.
2. Under **Web Services** click on the **List Menu Item**.
3. Click on **divaprotectWS**. The screen in the figure below will appear.
4. Click on **Access Throttling**.

Figure 15: Configuring Access Throttling



5. Select **Yes** from the dropdown menu next to **Enable Throttling**.

Figure 16: Initial Throttling Configuration Screen



6. The user may now configure the **Access Throttling** according to their specific requirements. When done with the configuration click one of the buttons at the bottom of the screen as described below.
7. It is highly recommended to set the maximum concurrent connections to 200 as shown in the figure below.

Figure 17: Maximum Concurrent Connections

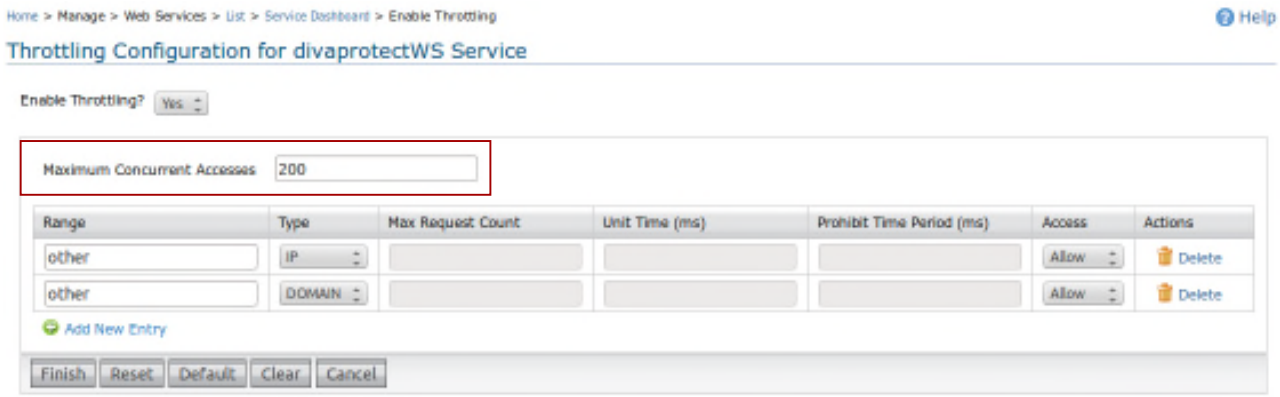


Table 2: Access Throttling Button Functions

Button Name	Function
Finish	Submits the current data shown on the screen and redirects to the previous screen.
Reset	Loads the last submitted configuration.
Default	Loads the default throttle configuration. To submit the configuration after using the **Default Button**, click the **Finish Button**.
Clear	Clears all text boxes on the screen.
Cancel	Returns to the previous page without saving changes.

8. The table below identifies all areas that may be configured and a brief explanation of each. When finished configuring the **Access Throttling**, click the **Finish Button** to complete the configuration. Clicking the **Add New Entry Link** will create a new blank line to enter additional configuration items.

Table 3: Access Throttling Parameter Descriptions

Parameter	Description
Enable Throttling?	Enables or disables Access Throttling.
Maximum Concurrent Accesses	Used to control the number of requests that are served at any given moment. If throttling is enabled globally, this value will be the maximum number of requests that are served by all the services deployed in the server simultaneously. If throttling is enabled at the service level, it is the maximum number of requests for that particular service. If it is enabled at the operation level, it is the maximum requests for that particular operation.
Range	The IP address range or the domain that is restricted from accessing the service. Requests from these clients will be restricted based on the specified values.

Parameter	Description
Type	This indicates the Type of Range. Valid values are IP or DOMAIN and can be selected using the dropdown box. If the range is given as a single IP address or a range of IP addresses (*e.g. 10.100.1.30-10.100.1.60*), this should be set to read IP. If the range is given as a domain (*e.g. *.wso2.com*), this should be set to read DOMAIN. If configurations of both types are specified (*IP and DOMAIN*) the highest (*first*) priority will be given to the DOMAIN level configurations.
Access	If this is set to **Allow**, no restriction is applied for that range and all requests are allowed to be submitted as they come arrive. If this is set to **Deny**, access is completely denied for that range. When the **Access** is set to **Allow** or **Deny**, **MRC**, **UT** and **PTP** parameters are not necessary and these fields are de-activated. If **Access** is set to **Control**, the specified constraints are applied for that particular range.
Maximum Request Count (*MRC*)	If **Access** is set to **Control**, this will be the maximum number of requests that are served within the time interval specified by the **Unit Time** (*UT*) parameter.
Unit Time (ms) (*UT*)	The time period in milliseconds (*ms*) during which the maximum requests are served. This is the number specified by the **Maximum Request Count** (*MRC*). The throttle starts counting the number of units from the moment it is enabled and the number of requests served within that period.

Parameter	Description
Prohibit Time Period (ms) (*PTP*)	If the **Maximum Request Count** (*MRC*) is achieved before the **Unit Time** (*UT*), this is the period during which no more requests are allowed to be submitted. Setting this value alters the **Unit Time** slot. **Example :** MRC = 50, UT = 50000, PTP = 5000 In this example, if 50 requests arrive within 35000ms (*35 seconds*) within a particular time period, no more requests are taken in for another 5000ms (*PTP = 5 seconds*). This time, the UT is altered to 35000ms + 5000ms = 40000ms (*40 seconds*).
Action	Clicking on the **Delete Link** will remove only the row associated with the link that was clicked.

6 Using the WSO2 TryIt Service

The **WSO2 TryIt Service** is a GUI used to try each API command and verify that it is functioning properly. The GUI has a SOAP-like look and feel making it very easy to accommodate any complexity level of XML Schema, and offers support for Schema and WSDL importing.

TryIt has the ability to position Request and Response views either vertically or horizontally and the available operations are listed in alphabetical order making them easy to locate. The ability to add frequently invoked operations to a **Priority Operations Group** allows the specified operations to appear at the top of the **Operations List** so they may be located quickly for testing.

The TryIt Service can be reached using a web browser at the following location (*this link only works if it is opened on the same host that DIVAS is installed on*):

- http://localhost:9763/services/DIVAprotectWS_1.0?tryit

Notes: When using the TryIt Service, `test` can be used as a valid session code if `RegisterClient` will not be run prior to running another command.

The TryIt program currently only works with REST. For SOAP testing please use the SOAPUI Tool.

Refer to the *Oracle DIVArchive WS User Manual* for more information about using the WSO2 TryIt Service.

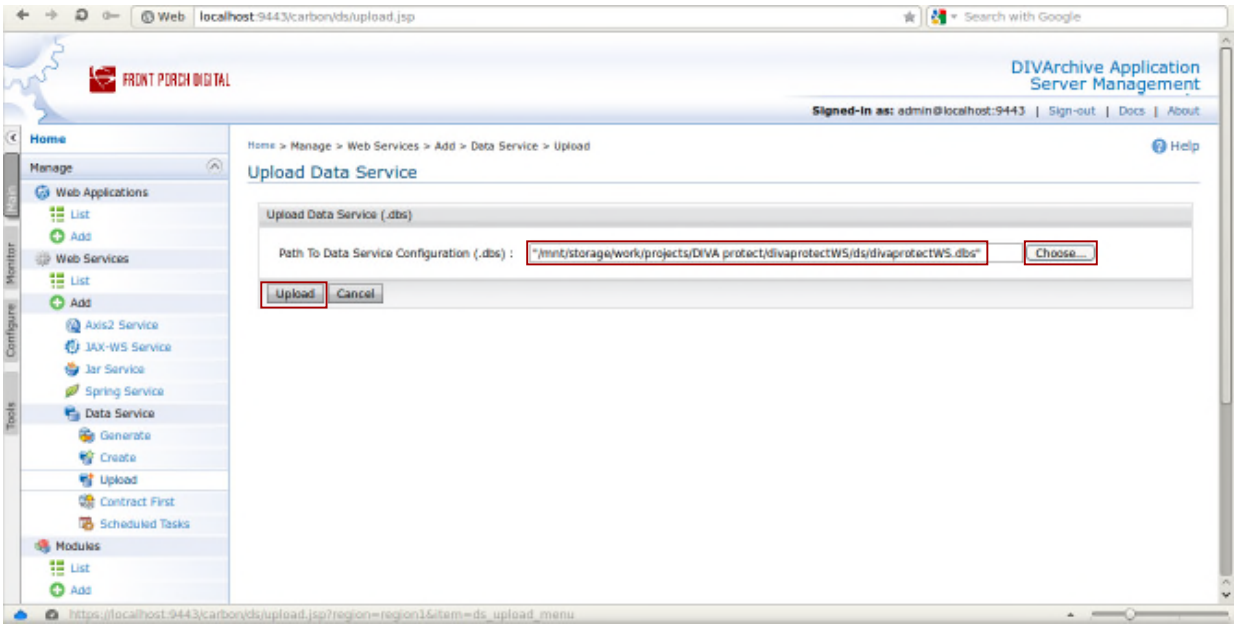
7 Upgrade Procedures

Note: In the case where a new version of DIVAprotectWS is delivered as part of a new version of DIVAS, please follow the DIVAS upgrade instructions.

Upgrading DIVAprotectWS is accomplished through the Web Console. First, the existing version must be removed from the system. In order to delete the currently deployed service and perform the upgrade, please follow these steps:

1) Connect to the **DIVArchive Application Server Management Console**.
2) Under **Web Services** click on the **List Menu Item**.
3) Select **`divaprotectWS`**.
4) Click on the **Delete Icon**.
   a. The currently installed version should now be removed.
5) Click on **Data Service**; then **Upload**.
6) Select the **`divaprotectWS.dbs`** file from the **`ds`** folder of the installation.
7) Click on the **Upload Button**.
8) Wait until the upload is complete (*approximately 1-2 minutes*).
9) Under **Web Services** click on the **List Menu Item**.
10) Check that **`divaprotectWS`** is running as described in 2.2.

Figure 18: Uploading the New Data Service's Configuration File



8 Data Service Export / Import

It is possible to export a modified Data Service to a special xml file having a **.dbs** extension. This makes it possible to import the same configuration into another DIVArchive Application Server. The **.dbs** file may be copied from:

<DIVAS_HOME>\application-server\repository\deployment\server\dataservices\divaprotectWS.dbs

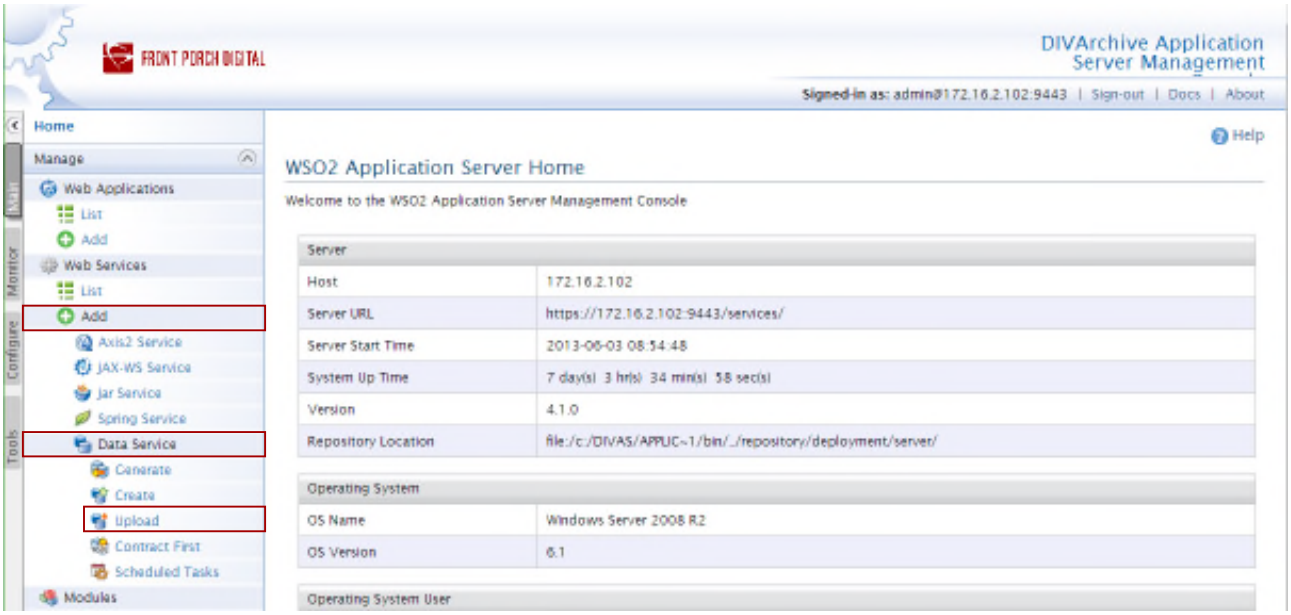
The content of the **.dbs** file is also available in the Embedded XML Editor. The user may create a new file using the filename structure **<service_name>.dbs,** and copy and paste the XML content into the new file.

A sample .dbs file can be found in 60.

The file may now be imported into an additional system using the following procedure:

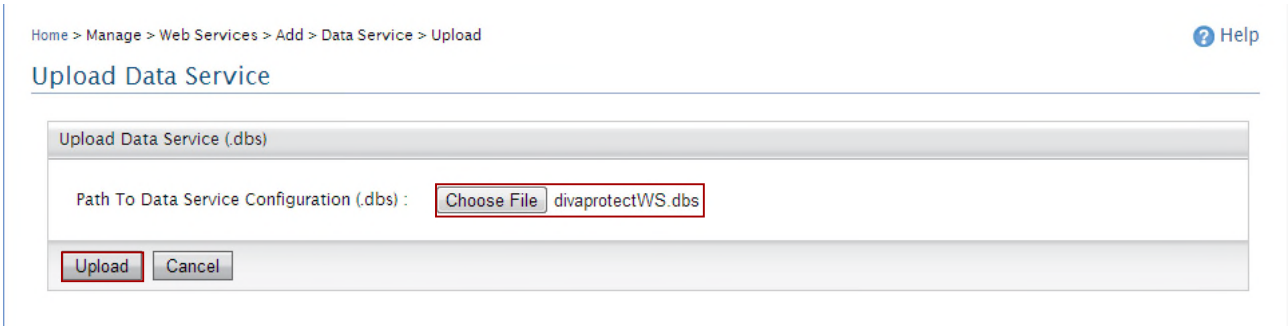
1. Connect to the **DIVArchive Application Server Management Console**.
2. Under **Add** and **Data Service** click on the **Upload Menu Item**.

Figure 19: Select the Upload Link under Add and Data Service



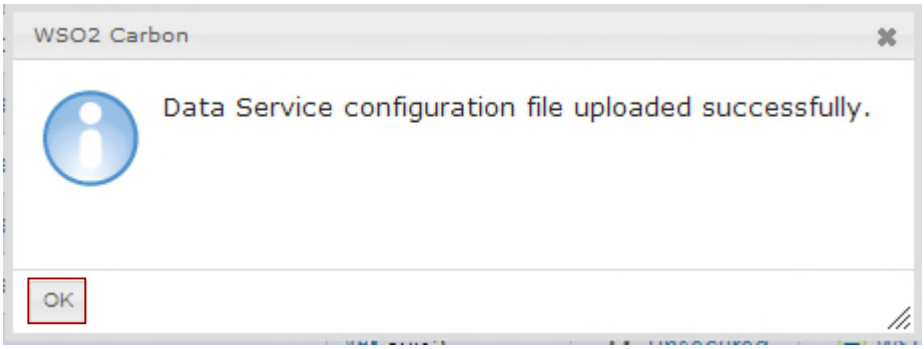
3. When the Upload Screen displays, click on the **Choose File Button** to open a typical Windows Explorer search screen and locate the file to be uploaded.
4. Once the file is located and selected, click on the **Upload Button** to upload the configuration.

*Figure 20: Upload page – Locate and Upload the **.dbs** File*



5. When the upload completes a popup windows will appear confirming that the upload was completed successfully.

Figure 21: Upload Successful Window



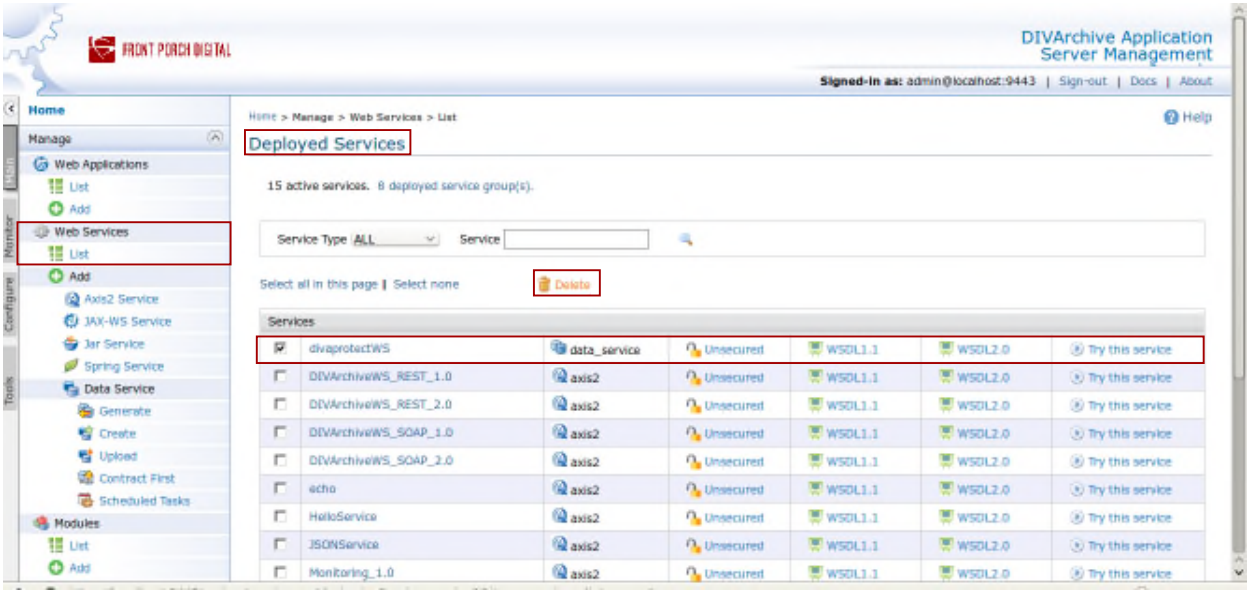
6. Clicking the **OK Button** will return the user to the **Web Services List Screen**.

9 Uninstallation

DIVAprotectWS uninstallation is accomplished through the Web Console. To delete the deployed service please follow this steps:

1) Under **Web Services** click on the **List Menu Item**.
2) Select **`divaprotectWS`** by checking the box to the left of the service name.
3) Click on the **Delete Icon**.

Figure 22: Deleting the Deployed Service



10 Frequently Asked Questions

10.1 Is the upgrade process for DIVAprotectWS difficult?

Answer:

Upgrading the DIVAprotectWS installation uses the same procedure as the standard DIVArchive upgrade process.

10.2 Why am I receiving errors when using the TryIt Tool with SOAP?

Answer:

Currently the WSO2 TryIt Tool is not 100% compatible with SOAP. This is due to issues with their code and has nothing to do with DIVArchive. Please use the SOAPUI Tool for testing SOAP interactions.

APPENDIX

A1 WSDL 1.1

```
<wsdl:definitions xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
 xmlns:ns1="http://ws.wso2.org/dataservice"
 xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"
 xmlns:http="http://schemas.xmlsoap.org/wsdl/http/"
 xmlns:ns0="com.fpdigital.ds.divaprotect.ws"
 xmlns:xs="http://www.w3.org/2001/XMLSchema"
 xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
 xmlns:mime="http://schemas.xmlsoap.org/wsdl/mime/"
 xmlns:soap12="http://schemas.xmlsoap.org/wsdl/soap12/"
 targetNamespace="com.fpdigital.ds.divaprotect.ws">
  <wsdl:documentation/>
  <wsdl:types>
    <xs:schema attributeFormDefault="unqualified"
     elementFormDefault="qualified"
     targetNamespace="com.fpdigital.ds.divaprotect.ws">
      <xs:element name="select_all_DPRT_METRIC_DATA_VIEW_operation">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" name="r_page" nillable="true"
             type="xs:int"/>
            <xs:element minOccurs="0" name="r_size" nillable="true"
             type="xs:int"/>
            <xs:element minOccurs="0" name="metric_id" nillable="true"
             type="xs:int"/>
            <xs:element minOccurs="0" name="metric_start_time"
             nillable="true" type="xs:date"/>
            <xs:element minOccurs="0" name="metric_end_time"
             nillable="true" type="xs:date"/>
            <xs:element minOccurs="0" name="metric_resource"
             nillable="true" type="xs:string"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="DPRT_METRIC_DATA_VIEWCollection"
       type="ns0:DPRT_METRIC_DATA_VIEWCollection"/>
      <xs:complexType name="DPRT_METRIC_DATA_VIEWCollection">
        <xs:sequence>
          <xs:element maxOccurs="unbounded" minOccurs="0"
           name="DPRT_METRIC_DATA_VIEW"
           type="ns0:DPRT_METRIC_DATA_VIEW"/>
        </xs:sequence>
      </xs:complexType>
      <xs:complexType name="DPRT_METRIC_DATA_VIEW">
        <xs:sequence>
          <xs:element name="ID" nillable="true" type="xs:decimal"/>
          <xs:element name="METRIC_ID" nillable="true"
           type="xs:decimal"/>
          <xs:element name="METRIC_RESOURCE_NAME" nillable="true"
           type="xs:string"/>
```

```
      <xs:element name="METRIC_START_DATE" nillable="true"
       type="xs:dateTime"/>
      <xs:element name="METRIC_VALUE" nillable="true"
       type="xs:decimal"/>
      <xs:element name="METRIC_VALUE_UNIT" nillable="true"
       type="xs:decimal"/>
      <xs:element name="EVENTS_COUNT" nillable="true"
       type="xs:decimal"/>
      <xs:element name="METRIC_CURRENT_INTERVAL_HOURS"
       nillable="true" type="xs:decimal"/>
      <xs:element name="METRIC_AGGREGATION_FIELD" nillable="true"
       type="xs:string"/>
      <xs:element name="METRIC_COLLECTION_FIELD" nillable="true"
       type="xs:string"/>
      <xs:element name="METRIC_LAST_UPDATE" nillable="true"
       type="xs:dateTime"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="DPRT_METRIC_INFOS_VIEWCollection"
   type="ns0:DPRT_METRIC_INFOS_VIEWCollection"/>
  <xs:complexType name="DPRT_METRIC_INFOS_VIEWCollection">
    <xs:sequence>
      <xs:element maxOccurs="unbounded" minOccurs="0"
       name="DPRT_METRIC_INFOS_VIEW"
       type="ns0:DPRT_METRIC_INFOS_VIEW"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="DPRT_METRIC_INFOS_VIEW">
    <xs:sequence>
      <xs:element name="METRIC_ID" nillable="true"
       type="xs:decimal"/>
      <xs:element name="METRIC_NAME" nillable="true"
       type="xs:string"/>
      <xs:element name="COLLECTION_TYPE" nillable="true"
       type="xs:string"/>
      <xs:element name="WEIGHT_FACTOR" nillable="true"
       type="xs:string"/>
      <xs:element name="COLLECTION_FIELD" nillable="true"
       type="xs:string"/>
      <xs:element name="COLLECTION_DATATYPE" nillable="true"
       type="xs:decimal"/>
      <xs:element name="AGGREGATION_FIELD" nillable="true"
       type="xs:string"/>
      <xs:element name="COLLECTION_INTERVAL_HOURS" nillable="true"
       type="xs:decimal"/>
      <xs:element name="STORAGE_INTERVAL" nillable="true"
       type="xs:decimal"/>
      <xs:element name="STORAGE_INTERVAL_UNIT" nillable="true"
       type="xs:string"/>
      <xs:element name="INITIAL_VALUE" nillable="true"
       type="xs:decimal"/>
```

```
    <xs:element name="ENABLED" nillable="true"
     type="xs:string"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="DP_RUNNING_REQUEST_VIEWCollection"
 type="ns0:DP_RUNNING_REQUEST_VIEWCollection"/>
<xs:complexType name="DP_RUNNING_REQUEST_VIEWCollection">
  <xs:sequence>
    <xs:element maxOccurs="unbounded" minOccurs="0"
     name="DP_RUNNING_REQUEST_VIEW"
     type="ns0:DP_RUNNING_REQUEST_VIEW"/>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="DP_RUNNING_REQUEST_VIEW">
  <xs:sequence>
    <xs:element name="RE_ID" nillable="true" type="xs:decimal"/>
    <xs:element name="RE_SUBMISSION_DATE" nillable="true"
     type="xs:dateTime"/>
    <xs:element name="RE_COMPLETION_DATE" nillable="true"
     type="xs:dateTime"/>
    <xs:element name="RE_TYPE" nillable="true"
     type="xs:string"/>
    <xs:element name="RE_STATUS" nillable="true"
     type="xs:string"/>
    <xs:element name="RE_SOURCE_DEST_NAME_PARM" nillable="true"
     type="xs:string"/>
    <xs:element name="RE_OBJECT_NAME_PARAMETER" nillable="true"
     type="xs:string"/>
    <xs:element name="RE_CATEGORY_PARAMETER" nillable="true"
     type="xs:string"/>
    <xs:element name="RE_GROUP_PARAMETER" nillable="true"
     type="xs:string"/>
    <xs:element name="RE_FILES_PATH_PARAMETER" nillable="true"
     type="xs:string"/>
    <xs:element name="RR_FILES_LIST" nillable="true"
     type="xs:string"/>
    <xs:element name="RE_QOS_PARAMETER" nillable="true"
     type="xs:string"/>
    <xs:element name="RE_PRIORITY_PARAMETER" nillable="true"
     type="xs:decimal"/>
    <xs:element name="RE_COMMENTS_PARAMETER" nillable="true"
     type="xs:string"/>
    <xs:element name="RE_OPTIONS_PARAMETER" nillable="true"
     type="xs:string"/>
    <xs:element name="RE_TAPE_PARAMETER" nillable="true"
     type="xs:string"/>
    <xs:element name="RE_TAPE_DESTINATION" nillable="true"
     type="xs:string"/>
    <xs:element name="RE_ERRORS_ASSOCIATED" nillable="true"
     type="xs:string"/>
    <xs:element name="RE_INSTANCE_ID" nillable="true"
     type="xs:decimal"/>
```

```
          <xs:element name="RE_ADD_SERVICES_PARAMETER" nillable="true"
           type="xs:decimal"/>
          <xs:element name="RE_PARTIAL_RESTR_FMT_PARM" nillable="true"
           type="xs:decimal"/>
          <xs:element name="RE_ADDITIONAL_INFO" nillable="true"
           type="xs:string"/>
          <xs:element name="RE_THIRDPARTY_ID" nillable="true"
           type="xs:string"/>
        </xs:sequence>
      </xs:complexType>
      <xs:element name="_getmetric_data">
        <xs:complexType>
          <xs:sequence>
            <xs:element minOccurs="0" name="r_page" nillable="true"
             type="xs:int"/>
            <xs:element minOccurs="0" name="r_size" nillable="true"
             type="xs:int"/>
            <xs:element minOccurs="0" name="metric_id" nillable="true"
             type="xs:int"/>
            <xs:element minOccurs="0" name="metric_start_time"
             nillable="true" type="xs:date"/>
            <xs:element minOccurs="0" name="metric_end_time"
             nillable="true" type="xs:date"/>
            <xs:element minOccurs="0" name="metric_resource"
             nillable="true" type="xs:string"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:schema>
    <xs:schema attributeFormDefault="unqualified"
     elementFormDefault="qualified"
     targetNamespace="http://ws.wso2.org/dataservice">
      <xs:element name="DataServiceFault" type="xs:string"/>
      <xs:element name="REQUEST_STATUS" type="xs:string"/>
    </xs:schema>
  </wsdl:types>
  <wsdl:message name="_getrunning_requestsRequest"/>
  <wsdl:message name="_getrunning_requestsResponse">
    <wsdl:part name="parameters"
     element="ns0:DP_RUNNING_REQUEST_VIEWCollection"/>
  </wsdl:message>
  <wsdl:message name="DataServiceFault">
    <wsdl:part name="parameters" element="ns1:DataServiceFault"/>
  </wsdl:message>
  <wsdl:message
   name="select_all_DPRT_METRIC_DATA_VIEW_operationRequest">
    <wsdl:part name="parameters"
     element="ns0:select_all_DPRT_METRIC_DATA_VIEW_operation"/>
  </wsdl:message>
  <wsdl:message
   name="select_all_DPRT_METRIC_DATA_VIEW_operationResponse">
```

```
  <wsdl:part name="parameters"
   element="ns0:DPRT_METRIC_DATA_VIEWCollection"/>
</wsdl:message>
<wsdl:message name="_getmetric_dataRequest">
  <wsdl:part name="parameters" element="ns0:_getmetric_data"/>
</wsdl:message>
<wsdl:message name="_getmetric_dataResponse">
  <wsdl:part name="parameters"
   element="ns0:DPRT_METRIC_DATA_VIEWCollection"/>
</wsdl:message>
<wsdl:message
 name="select_all_DPRT_METRIC_INFOS_VIEW_operationRequest"/>
<wsdl:message
 name="select_all_DPRT_METRIC_INFOS_VIEW_operationResponse">
  <wsdl:part name="parameters"
   element="ns0:DPRT_METRIC_INFOS_VIEWCollection"/>
</wsdl:message>
<wsdl:message
 name="select_all_DP_RUNNING_REQUEST_VIEW_operationRequest"/>
<wsdl:message
 name="select_all_DP_RUNNING_REQUEST_VIEW_operationResponse">
  <wsdl:part name="parameters"
   element="ns0:DP_RUNNING_REQUEST_VIEWCollection"/>
</wsdl:message>
<wsdl:message name="_getmetric_infosRequest"/>
<wsdl:message name="_getmetric_infosResponse">
  <wsdl:part name="parameters"
   element="ns0:DPRT_METRIC_INFOS_VIEWCollection"/>
</wsdl:message>
<wsdl:portType name="divaprotectWSPortType">
  <wsdl:operation name="_getrunning_requests">
    <wsdl:documentation/>
    <wsdl:input message="ns0:_getrunning_requestsRequest"
     wsaw:Action="urn:_getrunning_requests"/>
    <wsdl:output message="ns0:_getrunning_requestsResponse"
     wsaw:Action="urn:_getrunning_requestsResponse"/>
    <wsdl:fault message="ns0:DataServiceFault"
     name="DataServiceFault"
     wsaw:Action="urn:_getrunning_requestsDataServiceFault"/>
  </wsdl:operation>
  <wsdl:operation name="select_all_DPRT_METRIC_DATA_VIEW_operation">
    <wsdl:documentation/>
    <wsdl:input
     message="ns0:select_all_DPRT_METRIC_DATA_VIEW_operationRequest"
     wsaw:Action="urn:select_all_DPRT_METRIC_DATA_VIEW_operation"/>
    <wsdl:output
     message="ns0:select_all_DPRT_METRIC_DATA_VIEW_operationResponse"
     wsaw:Action="urn:select_all_DPRT_METRIC_DATA_VIEW_operationRespon
     se"/>
```

```
    <wsdl:fault message="ns0:DataServiceFault"
     name="DataServiceFault"
     wsaw:Action="urn:select_all_DPRT_METRIC_DATA_VIEW_operationData
     ServiceFault"/>
  </wsdl:operation>
  <wsdl:operation name="_getmetric_data">
    <wsdl:documentation/>
    <wsdl:input message="ns0:_getmetric_dataRequest"
     wsaw:Action="urn:_getmetric_data"/>
    <wsdl:output message="ns0:_getmetric_dataResponse"
     wsaw:Action="urn:_getmetric_dataResponse"/>
    <wsdl:fault message="ns0:DataServiceFault"
     name="DataServiceFault"
     wsaw:Action="urn:_getmetric_dataDataServiceFault"/>
  </wsdl:operation>
  <wsdl:operation
   name="select_all_DPRT_METRIC_INFOS_VIEW_operation">
    <wsdl:documentation/>
    <wsdl:input
     message="ns0:select_all_DPRT_METRIC_INFOS_VIEW_operationRequest"
     wsaw:Action="urn:select_all_DPRT_METRIC_INFOS_VIEW_operation"/>
    <wsdl:output
     message="ns0:select_all_DPRT_METRIC_INFOS_VIEW_operationResponse"
     wsaw:Action="urn:select_all_DPRT_METRIC_INFOS_VIEW_operationRespo
     nse"/>
    <wsdl:fault message="ns0:DataServiceFault"
     name="DataServiceFault"
     wsaw:Action="urn:select_all_DPRT_METRIC_INFOS_VIEW_operationDat
     aServiceFault"/>
  </wsdl:operation>
  <wsdl:operation
   name="select_all_DP_RUNNING_REQUEST_VIEW_operation">
    <wsdl:documentation/>
    <wsdl:input
     message="ns0:select_all_DP_RUNNING_REQUEST_VIEW_operationRequest"
     wsaw:Action="urn:select_all_DP_RUNNING_REQUEST_VIEW_operation"/>
    <wsdl:output
     message="ns0:select_all_DP_RUNNING_REQUEST_VIEW_operationResponse"
     wsaw:Action="urn:select_all_DP_RUNNING_REQUEST_VIEW_operationRespo
     nse"/>
    <wsdl:fault message="ns0:DataServiceFault"
     name="DataServiceFault"
     wsaw:Action="urn:select_all_DP_RUNNING_REQUEST_VIEW_operationDa
     taServiceFault"/>
  </wsdl:operation>
  <wsdl:operation name="_getmetric_infos">
    <wsdl:documentation/>
    <wsdl:input message="ns0:_getmetric_infosRequest"
     wsaw:Action="urn:_getmetric_infos"/>
    <wsdl:output message="ns0:_getmetric_infosResponse"
     wsaw:Action="urn:_getmetric_infosResponse"/>
```

```
      <wsdl:fault message="ns0:DataServiceFault"
       name="DataServiceFault"
       wsaw:Action="urn:_getmetric_infosDataServiceFault"/>
    </wsdl:operation>
  </wsdl:portType>
  <wsdl:binding name="divaprotectWSSOAP11Binding"
   type="ns0:divaprotectWSPortType">
    <soap:binding transport="http://schemas.xmlsoap.org/soap/http"
     style="document"/>
    <wsdl:operation name="_getrunning_requests">
      <soap:operation soapAction="urn:_getrunning_requests"
       style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
      <wsdl:fault name="DataServiceFault">
        <soap:fault use="literal" name="DataServiceFault"/>
      </wsdl:fault>
    </wsdl:operation>
    <wsdl:operation name="select_all_DPRT_METRIC_DATA_VIEW_operation">
      <soap:operation
       soapAction="urn:select_all_DPRT_METRIC_DATA_VIEW_operation"
       style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
      <wsdl:fault name="DataServiceFault">
        <soap:fault use="literal" name="DataServiceFault"/>
      </wsdl:fault>
    </wsdl:operation>
    <wsdl:operation name="_getmetric_data">
      <soap:operation soapAction="urn:_getmetric_data"
       style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
      <wsdl:fault name="DataServiceFault">
        <soap:fault use="literal" name="DataServiceFault"/>
      </wsdl:fault>
    </wsdl:operation>
    <wsdl:operation
     name="select_all_DPRT_METRIC_INFOS_VIEW_operation">
```

```
      <soap:operation
       soapAction="urn:select_all_DPRT_METRIC_INFOS_VIEW_operation"
       style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
      <wsdl:fault name="DataServiceFault">
        <soap:fault use="literal" name="DataServiceFault"/>
      </wsdl:fault>
    </wsdl:operation>
    <wsdl:operation
     name="select_all_DP_RUNNING_REQUEST_VIEW_operation">
      <soap:operation
       soapAction="urn:select_all_DP_RUNNING_REQUEST_VIEW_operation"
       style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
      <wsdl:fault name="DataServiceFault">
        <soap:fault use="literal" name="DataServiceFault"/>
      </wsdl:fault>
    </wsdl:operation>
    <wsdl:operation name="_getmetric_infos">
      <soap:operation soapAction="urn:_getmetric_infos"
       style="document"/>
      <wsdl:input>
        <soap:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap:body use="literal"/>
      </wsdl:output>
      <wsdl:fault name="DataServiceFault">
        <soap:fault use="literal" name="DataServiceFault"/>
      </wsdl:fault>
    </wsdl:operation>
  </wsdl:binding>
  <wsdl:binding name="divaprotectWSSOAP12Binding"
   type="ns0:divaprotectWSPortType">
    <soap12:binding transport="http://schemas.xmlsoap.org/soap/http"
     style="document"/>
    <wsdl:operation name="_getrunning_requests">
      <soap12:operation soapAction="urn:_getrunning_requests"
       style="document"/>
      <wsdl:input>
        <soap12:body use="literal"/>
      </wsdl:input>
```

```
    <wsdl:output>
      <soap12:body use="literal"/>
    </wsdl:output>
    <wsdl:fault name="DataServiceFault">
      <soap12:fault use="literal" name="DataServiceFault"/>
    </wsdl:fault>
  </wsdl:operation>
  <wsdl:operation name="select_all_DPRT_METRIC_DATA_VIEW_operation">
    <soap12:operation
     soapAction="urn:select_all_DPRT_METRIC_DATA_VIEW_operation"
     style="document"/>
    <wsdl:input>
      <soap12:body use="literal"/>
    </wsdl:input>
    <wsdl:output>
      <soap12:body use="literal"/>
    </wsdl:output>
    <wsdl:fault name="DataServiceFault">
      <soap12:fault use="literal" name="DataServiceFault"/>
    </wsdl:fault>
  </wsdl:operation>
  <wsdl:operation name="_getmetric_data">
    <soap12:operation soapAction="urn:_getmetric_data"
     style="document"/>
    <wsdl:input>
      <soap12:body use="literal"/>
    </wsdl:input>
    <wsdl:output>
      <soap12:body use="literal"/>
    </wsdl:output>
    <wsdl:fault name="DataServiceFault">
      <soap12:fault use="literal" name="DataServiceFault"/>
    </wsdl:fault>
  </wsdl:operation>
  <wsdl:operation
   name="select_all_DPRT_METRIC_INFOS_VIEW_operation">
    <soap12:operation
     soapAction="urn:select_all_DPRT_METRIC_INFOS_VIEW_operation"
     style="document"/>
    <wsdl:input>
      <soap12:body use="literal"/>
    </wsdl:input>
    <wsdl:output>
      <soap12:body use="literal"/>
    </wsdl:output>
    <wsdl:fault name="DataServiceFault">
      <soap12:fault use="literal" name="DataServiceFault"/>
    </wsdl:fault>
  </wsdl:operation>
  <wsdl:operation
   name="select_all_DP_RUNNING_REQUEST_VIEW_operation">
```

```
      <soap12:operation
       soapAction="urn:select_all_DP_RUNNING_REQUEST_VIEW_operation"
       style="document"/>
      <wsdl:input>
        <soap12:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap12:body use="literal"/>
      </wsdl:output>
      <wsdl:fault name="DataServiceFault">
        <soap12:fault use="literal" name="DataServiceFault"/>
      </wsdl:fault>
    </wsdl:operation>
    <wsdl:operation name="_getmetric_infos">
      <soap12:operation soapAction="urn:_getmetric_infos"
       style="document"/>
      <wsdl:input>
        <soap12:body use="literal"/>
      </wsdl:input>
      <wsdl:output>
        <soap12:body use="literal"/>
      </wsdl:output>
      <wsdl:fault name="DataServiceFault">
        <soap12:fault use="literal" name="DataServiceFault"/>
      </wsdl:fault>
    </wsdl:operation>
  </wsdl:binding>
  <wsdl:binding name="divaprotectWSHttpBinding"
   type="ns0:divaprotectWSPortType">
    <http:binding verb="POST"/>
    <wsdl:operation name="_getrunning_requests">
      <http:operation location="running_requests"/>
      <wsdl:input>
        <mime:content type="text/xml" part="parameters"/>
      </wsdl:input>
      <wsdl:output>
        <mime:content type="text/xml" part="parameters"/>
      </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="select_all_DPRT_METRIC_DATA_VIEW_operation">
      <http:operation
       location="select_all_DPRT_METRIC_DATA_VIEW_operation"/>
      <wsdl:input>
        <mime:content type="text/xml" part="parameters"/>
      </wsdl:input>
      <wsdl:output>
        <mime:content type="text/xml" part="parameters"/>
      </wsdl:output>
    </wsdl:operation>
```

```
  <wsdl:operation name="_getmetric_data">
    <http:operation location="metric_data"/>
    <wsdl:input>
      <mime:content type="text/xml" part="parameters"/>
    </wsdl:input>
    <wsdl:output>
      <mime:content type="text/xml" part="parameters"/>
    </wsdl:output>
  </wsdl:operation>
  <wsdl:operation
   name="select_all_DPRT_METRIC_INFOS_VIEW_operation">
    <http:operation
     location="select_all_DPRT_METRIC_INFOS_VIEW_operation"/>
    <wsdl:input>
      <mime:content type="text/xml" part="parameters"/>
    </wsdl:input>
    <wsdl:output>
      <mime:content type="text/xml" part="parameters"/>
    </wsdl:output>
  </wsdl:operation>
  <wsdl:operation
   name="select_all_DP_RUNNING_REQUEST_VIEW_operation">
    <http:operation
     location="select_all_DP_RUNNING_REQUEST_VIEW_operation"/>
    <wsdl:input>
      <mime:content type="text/xml" part="parameters"/>
    </wsdl:input>
    <wsdl:output>
      <mime:content type="text/xml" part="parameters"/>
    </wsdl:output>
  </wsdl:operation>
  <wsdl:operation name="_getmetric_infos">
    <http:operation location="metric_infos"/>
    <wsdl:input>
      <mime:content type="text/xml" part="parameters"/>
    </wsdl:input>
    <wsdl:output>
      <mime:content type="text/xml" part="parameters"/>
    </wsdl:output>
  </wsdl:operation>
</wsdl:binding>
<wsdl:service name="divaprotectWS">
  <wsdl:port name="SOAP11Endpoint"
   binding="ns0:divaprotectWSSOAP11Binding">
    <soap:address
     location="http://172.16.3.45:9763/services/divaprotectWS.SOAP11
     Endpoint/"/>
  </wsdl:port>
  <wsdl:port name="SecureSOAP11Endpoint"
   binding="ns0:divaprotectWSSOAP11Binding">
```

```
      <soap:address
       location="https://172.16.3.45:9443/services/divaprotectWS.Secur
       eSOAP11Endpoint/"/>
    </wsdl:port>
    <wsdl:port name="SecureSOAP12Endpoint"
     binding="ns0:divaprotectWSSOAP12Binding">
      <soap12:address
       location="https://172.16.3.45:9443/services/divaprotectWS.Secur
       eSOAP12Endpoint/"/>
    </wsdl:port>
    <wsdl:port name="SOAP12Endpoint"
     binding="ns0:divaprotectWSSOAP12Binding">
      <soap12:address
       location="http://172.16.3.45:9763/services/divaprotectWS.SOAP12
       Endpoint/"/>
    </wsdl:port>
    <wsdl:port name="HTTPEndpoint"
     binding="ns0:divaprotectWSHttpBinding">
      <http:address
       location="http://172.16.3.45:9763/services/divaprotectWS.HTTPEn
       dpoint/"/>
    </wsdl:port>
    <wsdl:port name="SecureHTTPEndpoint"
     binding="ns0:divaprotectWSHttpBinding">
      <http:address
       location="https://172.16.3.45:9443/services/divaprotectWS.Secur
       eHTTPEndpoint/"/>
    </wsdl:port>
  </wsdl:service>

</wsdl:definitions>
```

A2 Sample .dbs File

```
<data name="divaprotectWS" enableBatchRequests="true"
 serviceNamespace="com.fpdigital.ds.divaprotect.ws">
  <config id="divab2ds">
    <property
     name="org.wso2.ws.dataservice.driver">oracle.jdbc.driver.OracleD
     river</property>
    <property
     name="org.wso2.ws.dataservice.protocol">jdbc:oracle:thin:diva1_7
     10120/lib5@172.16.4.217:1521:lib5</property>
    <property
     name="org.wso2.ws.dataservice.user">diva1_710120</property>
    <property name="org.wso2.ws.dataservice.password">lib5</property>
    <property name="org.wso2.ws.dataservice.validation_query">SELECT *
     FROM DPRT_METRICS</property>
  </config>
  <query id="select_all_DPRT_METRIC_INFOS_VIEW_query"
   useConfig="divab2ds">
    <sql>SELECT METRIC_ID, METRIC_NAME, COLLECTION_TYPE,
         WEIGHT_FACTOR, COLLECTION_FIELD, COLLECTION_DATATYPE,
         AGGREGATION_FIELD, COLLECTION_INTERVAL_HOURS,
         STORAGE_INTERVAL, STORAGE_INTERVAL_UNIT, INITIAL_VALUE,
         ENABLED FROM METRIC_INFOS_VIEW</sql>
    <result element="DPRT_METRIC_INFOS_VIEWCollection"
     rowName="DPRT_METRIC_INFOS_VIEW">
      <element name="METRIC_ID" column="METRIC_ID"
       xsdType="xs:decimal" />
      <element name="METRIC_NAME" column="METRIC_NAME"
       xsdType="xs:string" />
      <element name="COLLECTION_TYPE" column="COLLECTION_TYPE"
       xsdType="xs:string" />
      <element name="WEIGHT_FACTOR" column="WEIGHT_FACTOR"
       xsdType="xs:string" />
      <element name="COLLECTION_FIELD" column="COLLECTION_FIELD"
       xsdType="xs:string" />
      <element name="COLLECTION_DATATYPE" column="COLLECTION_DATATYPE"
       xsdType="xs:decimal" />
      <element name="AGGREGATION_FIELD" column="AGGREGATION_FIELD"
       xsdType="xs:string" />
      <element name="COLLECTION_INTERVAL_HOURS"
       column="COLLECTION_INTERVAL_HOURS" xsdType="xs:decimal" />
      <element name="STORAGE_INTERVAL" column="STORAGE_INTERVAL"
       xsdType="xs:decimal" />
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    <element name="STORAGE_INTERVAL_UNIT"
     column="STORAGE_INTERVAL_UNIT" xsdType="xs:string" />
    <element name="INITIAL_VALUE" column="INITIAL_VALUE"
     xsdType="xs:decimal" />
    <element name="ENABLED" column="ENABLED" xsdType="xs:string" />
  </result>
</query>
<query id="select_all_DPRT_METRIC_DATA_VIEW_query"
 useConfig="divab2ds">
  <sql>SELECT ID, METRIC_ID, METRIC_RESOURCE_NAME,
       METRIC_START_DATE, METRIC_VALUE, METRIC_VALUE_UNIT,
       EVENTS_COUNT, METRIC_CURRENT_INTERVAL_HOURS,
       METRIC_AGGREGATION_FIELD, METRIC_COLLECTION_FIELD,
       METRIC_LAST_UPDATE  &#xd;FROM (&#xd;  SELECT *&#xd;    FROM
       (&#xd;    SELECT m.*, rownum r__&#xd;    FROM (&#xd;
       SELECT * &#xd;      FROM (&#xd;      SELECT ID, METRIC_ID,
       METRIC_RESOURCE_NAME, METRIC_START_DATE, METRIC_VALUE,
       METRIC_VALUE_UNIT, EVENTS_COUNT,
       METRIC_CURRENT_INTERVAL_HOURS, METRIC_AGGREGATION_FIELD,
       METRIC_COLLECTION_FIELD, METRIC_LAST_UPDATE  &#xd;      FROM
       METRIC_DATA_VIEW&#xd;      WHERE ( METRIC_ID = :metric_id )
       &#xd;and (METRIC_RESOURCE_NAME LIKE :metric_resource
       ||'%')&#xd;and ((:metric_start_time is null) or
       (METRIC_START_DATE >= :metric_start_time))&#xd;and
       ((:metric_end_time is null) or (METRIC_START_DATE &lt;=
       :metric_end_time))&#xd;      ORDER BY ID ASC)&#xd;      WHERE
       ( (:r_page is not null) and (:r_size is not null) and (
       rownum &lt; :r_page * :r_size + 1 ) )&#xd;         or (
       (:r_page is not null) and (:r_size is null) and ( rownum &lt;
       :r_page * 10 + 1 ))&#xd;         or ( (:r_page is null) and
       (:r_size is not null) and ( rownum &lt; :r_size + 1 ))&#xd;
       or ( (:r_page is null) and (:r_size is null) and ( rownum
       &lt; 11 ))&#xd;    ) m &#xd;  )&#xd;  WHERE( (:r_page is not
       null) and (:r_size is not null) and ( r__ >= ((:r_page) - 1)
       * (:r_size)  + 1 ) )&#xd;    or ( (:r_page is not null) and
       (:r_size is null) and ( r__ >= ((:r_page) - 1) * 10  + 1
       ))&#xd;    or ( (:r_page is null) and ( r__ >= 1
       ))&#xd;)</sql>
  <result element="DPRT_METRIC_DATA_VIEWCollection"
   rowName="DPRT_METRIC_DATA_VIEW">
    <element name="ID" column="ID" xsdType="xs:decimal" />
    <element name="METRIC_ID" column="METRIC_ID"
     xsdType="xs:decimal" />
    <element name="METRIC_RESOURCE_NAME"
     column="METRIC_RESOURCE_NAME" xsdType="xs:string" />
    <element name="METRIC_START_DATE" column="METRIC_START_DATE"
     xsdType="xs:dateTime" />
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      <element name="METRIC_VALUE" column="METRIC_VALUE"
       xsdType="xs:decimal" />
      <element name="METRIC_VALUE_UNIT" column="METRIC_VALUE_UNIT"
       xsdType="xs:decimal" />
      <element name="EVENTS_COUNT" column="EVENTS_COUNT"
       xsdType="xs:decimal" />
      <element name="METRIC_CURRENT_INTERVAL_HOURS"
       column="METRIC_CURRENT_INTERVAL_HOURS" xsdType="xs:decimal" />
      <element name="METRIC_AGGREGATION_FIELD"
       column="METRIC_AGGREGATION_FIELD" xsdType="xs:string" />
      <element name="METRIC_COLLECTION_FIELD"
       column="METRIC_COLLECTION_FIELD" xsdType="xs:string" />
      <element name="METRIC_LAST_UPDATE" column="METRIC_LAST_UPDATE"
       xsdType="xs:dateTime" />
    </result>
    <param name="r_page" sqlType="INTEGER" ordinal="1"
     defaultValue="1" />
    <param name="r_size" sqlType="INTEGER" ordinal="2"
     defaultValue="100" />
    <param name="metric_id" sqlType="INTEGER" ordinal="3"
     defaultValue="1" />
    <param name="metric_start_time" sqlType="DATE" ordinal="4"
     defaultValue="1970-01-01" />
    <param name="metric_end_time" sqlType="DATE" ordinal="5"
     defaultValue="2200-12-12" />
    <param name="metric_resource" sqlType="STRING" ordinal="6"
     defaultValue="%" />
  </query>
  <query id="select_all_DP_RUNNING_REQUEST_VIEW_query"
   useConfig="divab2ds">
    <sql>SELECT RE_ID, RE_SUBMISSION_DATE, RE_COMPLETION_DATE,
         RE_TYPE, RE_STATUS, RE_SOURCE_DEST_NAME_PARM,
         RE_OBJECT_NAME_PARAMETER, RE_CATEGORY_PARAMETER,
         RE_GROUP_PARAMETER, RE_FILES_PATH_PARAMETER, RR_FILES_LIST,
         RE_QOS_PARAMETER, RE_PRIORITY_PARAMETER,
         RE_COMMENTS_PARAMETER, RE_OPTIONS_PARAMETER,
         RE_TAPE_PARAMETER, RE_TAPE_DESTINATION,
         RE_ERRORS_ASSOCIATED, RE_INSTANCE_ID,
         RE_ADD_SERVICES_PARAMETER, RE_PARTIAL_RESTR_FMT_PARM,
         RE_ADDITIONAL_INFO, RE_THIRDPARTY_ID&#xd;FROM
         DP_RUNNING_REQUEST_VIEW</sql>
    <result element="DP_RUNNING_REQUEST_VIEWCollection"
     rowName="DP_RUNNING_REQUEST_VIEW">
      <element name="RE_ID" column="RE_ID"  xsdType="xs:decimal" />
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<element name="RE_SUBMISSION_DATE" column="RE_SUBMISSION_DATE"
 xsdType="xs:dateTime" />
<element name="RE_COMPLETION_DATE" column="RE_COMPLETION_DATE"
 xsdType="xs:dateTime" />
<element name="RE_TYPE" column="RE_TYPE" xsdType="xs:string" />
<element name="RE_STATUS" column="RE_STATUS" xsdType="xs:string" />
<element name="RE_SOURCE_DEST_NAME_PARM"
 column="RE_SOURCE_DEST_NAME_PARM"  xsdType="xs:string"/>
<element name="RE_OBJECT_NAME_PARAMETER"
 column="RE_OBJECT_NAME_PARAMETER" xsdType="xs:string" />
<element name="RE_CATEGORY_PARAMETER"
 column="RE_CATEGORY_PARAMETER" xsdType="xs:string" />
<element name="RE_GROUP_PARAMETER" column="RE_GROUP_PARAMETER"
 xsdType="xs:string" />
<element name="RE_FILES_PATH_PARAMETER"
 column="RE_FILES_PATH_PARAMETER" xsdType="xs:string" />
<element name="RR_FILES_LIST" column="RR_FILES_LIST"
 xsdType="xs:string" />
<element name="RE_QOS_PARAMETER" column="RE_QOS_PARAMETER"
 xsdType="xs:string" />
<element name="RE_PRIORITY_PARAMETER"
 column="RE_PRIORITY_PARAMETER" xsdType="xs:decimal" />
<element name="RE_COMMENTS_PARAMETER"
 column="RE_COMMENTS_PARAMETER" xsdType="xs:string" />
<element name="RE_OPTIONS_PARAMETER"
 column="RE_OPTIONS_PARAMETER" xsdType="xs:string" />
<element name="RE_TAPE_PARAMETER" column="RE_TAPE_PARAMETER"
 xsdType="xs:string" />
<element name="RE_TAPE_DESTINATION" column="RE_TAPE_DESTINATION"
 xsdType="xs:string" />
<element name="RE_ERRORS_ASSOCIATED"
 column="RE_ERRORS_ASSOCIATED" xsdType="xs:string" />
<element name="RE_INSTANCE_ID" column="RE_INSTANCE_ID"
 xsdType="xs:decimal" />
<element name="RE_ADD_SERVICES_PARAMETER"
 column="RE_ADD_SERVICES_PARAMETER" xsdType="xs:decimal" />
<element name="RE_PARTIAL_RESTR_FMT_PARM"
 column="RE_PARTIAL_RESTR_FMT_PARM" xsdType="xs:decimal" />
<element name="RE_ADDITIONAL_INFO" column="RE_ADDITIONAL_INFO"
 xsdType="xs:string" />
<element name="RE_THIRDPARTY_ID" column="RE_THIRDPARTY_ID"
 xsdType="xs:string" />
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    </result>
  </query>
  <operation name="select_all_DPRT_METRIC_DATA_VIEW_operation">
    <call-query href="select_all_DPRT_METRIC_DATA_VIEW_query">
      <with-param name="r_page" query-param="r_page" />
      <with-param name="r_size" query-param="r_size" />
      <with-param name="metric_id" query-param="metric_id" />
      <with-param name="metric_start_time" query-
        param="metric_start_time" />
      <with-param name="metric_end_time" query-param="metric_end_time" />
      <with-param name="metric_resource" query-param="metric_resource" />
    </call-query>
  </operation>
  <operation name="select_all_DPRT_METRIC_INFOS_VIEW_operation">
    <call-query href="select_all_DPRT_METRIC_INFOS_VIEW_query" />
  </operation>
  <operation name="select_all_DP_RUNNING_REQUEST_VIEW_operation">
    <call-query href="select_all_DP_RUNNING_REQUEST_VIEW_query" />
  </operation>
  <resource path="metric_data" method="GET">
    <call-query href="select_all_DPRT_METRIC_DATA_VIEW_query">
      <with-param name="r_page" query-param="r_page" />
      <with-param name="r_size" query-param="r_size" />
      <with-param name="metric_id" query-param="metric_id" />
      <with-param name="metric_start_time" query-
        param="metric_start_time" />
      <with-param name="metric_end_time" query-param="metric_end_time" />
      <with-param name="metric_resource" query-param="metric_resource" />
    </call-query>
  </resource>
  <resource path="metric_infos" method="GET">
    <call-query href="select_all_DPRT_METRIC_INFOS_VIEW_query" />
  </resource>
  <resource path="running_requests" method="GET">
    <call-query href="select_all_DP_RUNNING_REQUEST_VIEW_query" />
  </resource>
</data>
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