Oracle[®] Public Cloud Machine

Using Oracle Managed File Transfer Cloud Service 17.1.2 E78504-03

April 2017

Oracle Managed File Transfer (MFT) is a standards-based, endto-end managed file gateway. Security is maintained with a number of security policies such as OWSM. This guide describes how to use MFT in the cloud. Oracle Public Cloud Machine Using Oracle Managed File Transfer Cloud Service, 17.1.2

E78504-03

Copyright © 2016, 2017, Oracle and/or its affiliates. All rights reserved.

Primary Authors: Larry Hoffman, Mary Kennedy

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, then 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 about 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 unless otherwise set forth in an applicable agreement between you and Oracle. 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, except as set forth in an applicable agreement between you and Oracle.

Contents

Pr	eface	. v
	Audience	v
	Documentation Accessibility	. v
	Related Resources	. v
	Conventions	vi
1	Getting Started with Oracle Managed File Transfer Cloud Service	
	About Oracle Managed File Transfer Cloud Service	1-1
	Differences Between the Cloud and On-Premises Environments	1-1
	Provisioning Oracle Managed File Transfer Cloud Service	1-2
	User and Administrator Tasks	1-3
	Review and Configure Retention Policies	1-4

Preface

Using Oracle Managed File Transfer Cloud Service describes how to use Oracle Managed File Transfer Cloud Service in the cloud.

Topics:

- Audience
- Related Resources
- Conventions

Audience

Oracle[®] *Public Cloud Machine Using Oracle Managed File Transfer Cloud Service* is intended for users who want to transfer files with Oracle Managed File Transfer Cloud Service on Oracle Public Cloud Machine.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup? ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/ topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/ topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Related Resources

See these related Oracle resources:

- Oracle Public Cloud Machine https://cloud.oracle.com/cloudmachine
- Cloud Machine Documentation
- Public Cloud Machine Using Oracle SOA Cloud Service

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1

Getting Started with Oracle Managed File Transfer Cloud Service

The following topics describe Oracle Managed File Transfer Cloud Service concepts, provisioning requirements and post-provisioning tasks.

Topics

- About Oracle Managed File Transfer Cloud Service
- Differences Between the Cloud and On-Premises Environments
- Provisioning Oracle Managed File Transfer Cloud Service
- Post-Provisioning Tasks

About Oracle Managed File Transfer Cloud Service

Oracle Managed File Transfer (MFT) is a standards-based, end-to-end managed file gateway. Security is maintained with a number of security policies such as OWSM.

To learn more about Oracle Managed File Transfer, see:

- Using Oracle Managed File Transfer 12.2.1.2
- Using Oracle Managed File Transfer 12.1.3

Differences Between the Cloud and On-Premises Environments

Some features of Oracle Managed File Transfer behave differently in the cloud than in an on-premises environment.

Oracle Managed File Transfer Cloud Service	Oracle Managed File Transfer On Premises
You provision Oracle Managed File Transfer Cloud Service from the SOA Cloud Service console. Run the Oracle SOA Cloud Service provisioning wizard and select Oracle Managed File Transfer Cloud Service.	You must manually install Oracle Managed File Transfer on your own hardware.
See Provisioning Oracle Managed File Transfer Cloud Service for information about the Oracle SOA Cloud Service provisioning wizard, including prerequisites for running the wizard.	

Oracle Managed File Transfer Cloud Service

Oracle Managed File Transfer On Premises

File source and targets are available, but not typically used in the cloud. The FTP sever is not typically used in secure environments. It is recommended that you use sFTP exclusively in the cloud.

For a complete list of differences between Oracle SOA in the cloud and on-premises environments, see Differences Between the Cloud and On-Premises Environments of *Using Oracle SOA Cloud Service*.

Provisioning Oracle Managed File Transfer Cloud Service

Select Oracle Managed File Transfer Cloud Service when you run the Oracle SOA Cloud Service provisioning wizard.

From the Oracle SOA Cloud Service console, click the **Create Instance** button to start the provisioning wizard. On the Service Type page, select **MFT Cluster**, then complete the provisioning process.

Preprovisioning and Provisioning Tasks

The following table provides an overview of the pre-provisioning and provisioning tasks to complete for Oracle Managed File Transfer Cloud Service.

Task	For More Information, See
Before you begin running the Oracle SOA Cloud Service provisioning wizard, you must satisfy the following prerequisites:	Before You Begin with Oracle SOA Cloud Service of <i>Using Oracle SOA Cloud Service</i> . and
• When creating an Oracle SOA Cloud Service instance, you have to provide a public access network and a database network.	Prerequisites to Provisioning Oracle SOA Cloud Service of <i>Using Oracle SOA Cloud</i> <i>Service</i> .
• Oracle SOA Cloud Service uses a remote networked disk to store Oracle SOA Cloud Service instance backups.	
 Obtain a secure shell (SSH) public/ private key pair 	
When you run the Oracle SOA Cloud Service provisioning wizard, you are prompted to enter details about these services and components.	
Understand how you access the Oracle SOA Cloud Service Console to run the provisioning wizard.	Accessing Oracle SOA Cloud Service Console of Using Oracle SOA Cloud Service.
Run the provisioning wizard and select MFT Cluster as the service type.	Using the Provisioning Wizard of <i>Using Oracle SOA Cloud Service</i> .

Note:

After you complete the provisioning process, you must complete the post-provisioning tasks described in Post-Provisioning Tasks.

User and Administrator Tasks

The following table provides an overview of the user and administrator tasks you can perform after you have provisioned Oracle Managed File Transfer Cloud Service and completed the post-provisioning tasks.

User and Administrator Tasks

Task	For More Information, See
See what you can do with Oracle Managed File Transfer.	 What You Can Do with Oracle Managed File Transfer 12.2.1.2 What You Can Do with Oracle Managed File Transfer 12.1.3
Learn about Oracle Managed File Transfer use case patterns.	 Oracle Managed File Transfer Functional Use Case Patterns 12.2.1.2 Oracle Managed File Transfer Functional Use Case Patterns 12.1.3
Understand Oracle Managed File Transfer architecture.	 Oracle Managed File Transfer Architecture 12.2.1.2 Oracle Managed File Transfer Architecture 12.1.3
Understand Oracle Managed File Transfer components.	 Components of Oracle Managed File Transfer 12.2.1.2 Components of Oracle Managed File Transfer 12.1.3
Understand Oracle Managed File Transfer sources, targets, and transfers.	 Artifacts: Sources, Targets, and Transfers 12.2.1.2 Artifacts: Sources, Targets, and Transfers 12.1.3
Understand Oracle Managed File Transfer user roles.	 Oracle Managed File Transfer User Roles 12.2.1.2 Oracle Managed File Transfer User Roles 12.1.3
Understand Oracle Managed File Transfer navigation.	 Screen Navigation in Oracle Managed File Transfer 12.2.1.2 Screen Navigation in Oracle Managed File Transfer 12.1.3
Review and Configure Retention Policies	Review and Configure Retention Policies

Review and Configure Retention Policies

File storage in the cloud might be constrained so it's important to proactively manage limited file storage services by purging old instances and payloads.

In order to keep your database and storage resources from filling up, periodically purge artifacts from previous transfers. By default, Oracle Managed File Transfer Cloud Service checks daily at 8:00 AM for files that have been around longer than seven days and purges any that it finds. You can change these default values to suit your needs. How often you purge depends on your usage as does the length of time you retain the artifacts.

The tasks in the following topics describe how to change the retention value and the schedule.

Topics

- Changing the Purge Retention Policy
- Changing the Purge Schedule

Changing the Purge Retention Policy

If you want to change the length of time you retain transfer artifacts such as old instances and payloads, edit the purgeInstanceData.py file located on each MFT managed server.

The following steps describe how to change the retention policy.

- 1. ssh to the mft-purge directory located under the domain home directory on each managed server VM.
- 2. On each MFT managed server, modify the retention days value by editing the following line in purgeInstanceData.py.

 ${\tt retentionDays}$ = 7 ~# Duration for which MFT Data has to be retained during purge operation

For example:

- retentionDays = 7 purges all data older than 1 week (default)
- retentionDays = 14 purges all data older than 2 weeks
- retentionDays = 1 purges all data older than 1 day

Note: This file can be edited at any time and the change takes effect for all future scheduled purges.

Changing the Purge Schedule

By default, Oracle Managed File Transfer Cloud Service checks daily at 8:00 AM for files that have been around longer than the retention value and purges any that it finds. You can change the schedule to suit your needs. How often you purge depends on your usage.

Note: Follow these instructions if you are using Oracle Managed File Transfer Cloud Service versions 12.1.3 or 12.2.1. If using version 12.2.1.2, you can perform this task from the Administration page of the Oracle Managed File Transfer Console.

The following steps describe how to change the schedule by editing thepurge_schedule.py script, stopping and deleting the original scheduler job and then running the startSchedulePurge.sh script to start the new schedule.

- 1. ssh to the mft-purge directory located under the domain home directory on each managed server VM.
- On each MFT managed server, modify the purge schedule by editing the values for frequency, interval, and begin_time in the following line in purge_schedule.py.

manageSchedulerSchedule('CREATE', 'MFTCustomHostingApp',schName = scheduleName, frequency = 'DAY',interval = 1,begin_time = '08:00:00:01:01:2015')

- **frequency**: The frequency of recurrence. Valid values are: [SECOND, MINUTE,HOUR,DAY, WEEK,MONTH, YEAR]
- **interval**: The integer value specifying the repeat interval for frequency. For example, an interval value of 2 combined with a frequency of WEEK, runs once every 2 weeks.
- **begin_time**: The start time for the recurring schedule. The format is: HH:MM:SS:DD:MM:YYYY

Examples:

To run once per day at 8:00 AM:

```
manageSchedulerSchedule('CREATE', 'MFTCustomHostingApp',schName =
scheduleName, frequency = 'DAY',interval = 1, begin_time =
'08:00:00:01:01:2016')
```

To run every two days at 8:00 AM:

manageSchedulerSchedule('CREATE', 'MFTCustomHostingApp',schName =
scheduleName, frequency = 'DAY',interval = 2, begin_time =
'08:00:00:01:01:2016')

To run once per week at midnight:

```
manageSchedulerSchedule('CREATE', 'MFTCustomHostingApp',schName =
scheduleName, frequency = 'WEEK',interval = 1, begin_time =
'00:00:00:01:01:2016')
```

- **3.** On any one of the running managed servers, follow these steps to cancel all existing jobs associated with the schedule.
 - **a.** Log in to the Oracle Enterprise Manager (EM) console.
 - **b.** Find **Scheduling Services** in the EM user interface.
 - c. Click ESSAPP(*mft_managed_server*). For example, ESSAP(mft_server1).
 - d. Click Show All Running Jobs.

- **e.** A search menu should appear. Find the name of the job you want to delete. See:
 - Searching for Oracle Enterprise Scheduler Job Requests 12.2.1.2
 - Searching for Oracle Enterprise Scheduler Job Requests 12.1.3
- f. Click the job request that corresponds to the job you want to delete.
- g. Click Actions and then select Cancel to stop the job.
- 4. Connect to WLST.
 - **a.** ssh to any one of the MFT managed server virtual machines and log in.
 - **b.** cd to the bin directory under the MFT installation directory:

cd mft_installation_directory/oracle_common/common/bin

- c. Run the ./wlst.sh command.
- d. Use the following command to connect to the server:

connect('username','password','t3://url_to_server:port_number');

5. Use the following commands to delete the schedule that you want to update:

```
manageSchedulerSchedule('DELETE','MFTCustomHostingApp',schName='mft/
purgeMFTInstances')
manageSchedulerJobDefn('DELETE','MFTCustomHostingApp',jobName='mft/MFT_Purge')
```

- **6.** Use the following commands to verify that the schedule and job have been deleted from the hosting application.
 - a. manageSchedulerJobDefn('SHOW', 'MFTCustomHostingApp')

This command lists jobs running on the hosting application. Verify that the job definition you deleted is not listed.

b. manageSchedulerSchedule('SHOW','MFTCustomHostingApp')

This command lists schedules running on the hosting application. Verify that the schedule you deleted is not listed.

7. On any one of the Oracle Managed File Transfer managed server nodes, run the startSchedulePurge.sh script located in the mft-purge directory located under the domain home directory on each managed server VM.

To read more about running Oracle Enterprise Scheduler WLST commands, see:

- Oracle Enterprise Scheduler Custom WLST Commands 12.2.1.2
- Oracle Enterprise Scheduler Custom WLST Commands 12.1.3

To read more about using Oracle Enterprise Manager to monitor Oracle Enterprise Scheduler jobs, see:

- Managing Oracle Enterprise Scheduler Requests 12.2.1.2
- Managing Oracle Enterprise Scheduler Requests 12.1.3

Post-Provisioning Tasks

After you provision your first Oracle Managed File Transfer Cloud Service (MFT), there are a couple of additional post-provisioning tasks you have to complete for the service to work correctly.

- **1.** You have to set up the MFT embedded sFTP server. This task is described in the following tutorial.
 - Oracle Managed File Transfer Cloud Service Post-Provisioning Task Setting Up the MFT Embedded sFTP Server
- **2.** You have to configure one of the following options for the MFT embedded servers.
 - **a.** Configure both Oracle Compute and Oracle Traffic Director (OTD) for the MFT embedded servers.
 - Oracle Managed File Transfer Cloud Service Post-Provisioning Task -Configuring Oracle Compute and Oracle Traffic Director for MFT Embedded Servers
 - **b.** Configure only Oracle Compute for the MFT embedded servers.
 - Oracle Managed File Transfer Cloud Service Post-Provisioning Task -Configuring Oracle Compute Only for MFT Embedded Servers