

V9.1.1

REMOTE AGENT

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Contacting Coviant Software

Installation and configuration support is provided under warranty for 45 days from initial purchase, as well as under annual maintenance agreements. Email and phone support is available from 9 a.m. ET to 5 p.m. ET weekdays. If you require assistance, contact Coviant Software support as follows:

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1 Overview

Diplomat Remote Agent is a standalone application that allows a Diplomat Managed File Transfer (MFT) site to send and receive files to/from a Diplomat Remote Agent site. All file transfer jobs are initiated by the Diplomat MFT site. Connections to Diplomat Remote Agent are automatically SSL-protected and authenticated using OpenPGP keys. Data files can optionally be OpenPGP-protected, as well.

NOTE: Connection to Diplomat Remote Agent sites is ONLY supported with a Diplomat MFT Standard or Enterprise Edition license.

- Diplomat Remote Agent Site**

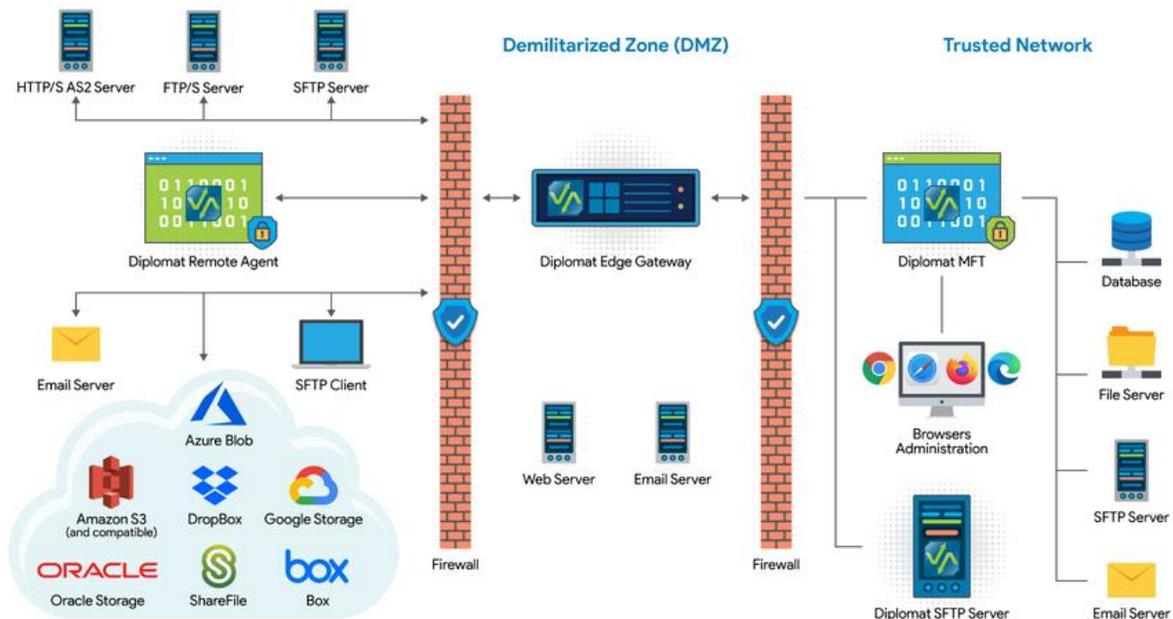
Diplomat Remote Agent is a Java-based service that listens for connection requests from a Diplomat MFT site. The connection can be completed only if the Diplomat MFT site has an OpenPGP private key that matches the OpenPGP public key on the Diplomat Remote Agent site.

Diplomat Remote Agent sites can be located on the same network as the Diplomat MFT site or at a remote location such as a branch office or trading partner site. The domain or IP address of the Diplomat Remote Agent site and the specified connection port must be accessible by the Diplomat MFT site.

Diplomat Remote Agent runs as a service. On Windows systems, the service is named *Diplomat Remote Agent 64*. On Linux systems, the service is named *diplomatRemoteAgent*.
- Diplomat Managed File Transfer Site**

Diplomat Managed File Transfer is a Java-based, client-server application. Its runtime engine executes file transfer jobs based on data stored in the Diplomat MFT transaction database. Diplomat MFT sites can transfer files to and from local network directories, transport servers (e.g., email, HTTP/S, FTP, FTPS, SFTP and SMB servers), public cloud storage sites or Diplomat Remote Agent sites. It creates a log file with system messages, email or paging notifications, an audit database, and archive copies of transaction files, if desired.

The following diagram shows a typical configuration for a Diplomat MFT solution with an external Diplomat Remote Agent site.



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2 Installation

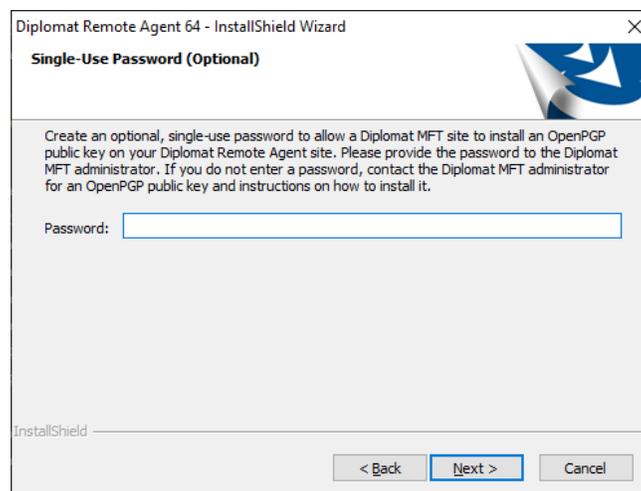
Diplomat Remote Agent runs independently of other Diplomat MFT components and is supported on Windows and Linux computers.

2.1 Windows Installation

In addition to performing an initial installation, you can do a **Repair** install to reinstall a previously installed Diplomat Remote Agent and a **Remove** install to uninstall Diplomat Remote Agent.

2.1.1 Initial Install

1. Go to the Coviant Software Support Portal at <https://www.coviantsoftware.com/support/> and log on using your organization's credentials. You can then download the installation file for Diplomat Remote Agent.
2. On the system or Active Directory where Diplomat Remote Agent is to be installed, create and log into an account to be used as the logon identity of the Diplomat Remote Agent Service, the service account. You must use a service account with administrator privileges on the local computer where it will be installed.
3. Double-click the installer file to start the installation. You can change an installation setting by selecting **Back** until you reach the previous window where the change is needed. Otherwise, select **Next** to continue to the next step. You can select **Cancel** at any time to stop the installation.
4. Scroll through the license agreement and review the terms and conditions. If you agree with the terms, select 'I accept the terms of the license agreement' and **Next** to continue. You may print a copy of the license agreement for your records using the **Print** button.
5. Choose the type of setup you would like. Select **Complete** to install Diplomat Remote Agent in the default location (C:\Program Files\Coviant Software\Diplomat-RemoteAgent). Select **Custom** to **change the installation location**.
6. For **Custom**, click **Next** to accept the default location or **Change** to choose a new installation directory.
7. If you have not already received a diplomatMFTPublicKey.asc file from the Diplomat MFT administrator, you can create a single-use password that allows a Diplomat MFT site to automatically install the diplomatMFTPublicKey.asc file for you. The password must be sent to the Diplomat MFT administrator.



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8. Select **Install** on the next screen to start the installation.
9. Click **Finish** to exit the installer once completed.
10. If a software or OS firewall is enabled on the Diplomat Remote Agent system, configure it to allow incoming connections on the appropriate port, 8082 by default.
11. Start the Windows service 'Diplomat Remote Agent 64'. The Diplomat Remote Agent service is set to start automatically on reboot. You can manually start the service by running **services.msc**.
12. Confirm that the Diplomat Remote Agent service is listening properly on TCP port 8082. The Diplomat Remote Agent port is set to 8082 by default. If port 8082 is already in use, or if you wish to change it for some other reason, refer to [Changing Diplomat Services Port Numbers](#) article in the Knowledge Base.
13. A new directory structure is created during the installation of the Diplomat Remote Agent. If you selected the default installation location, this directory structure is located under *C:\Program Files\Coviant Software\Diplomat-RemoteAgent*. The Diplomat Remote Agent data files are located under *C:\ProgramData\Coviant Software\Diplomat-RemoteAgent*. Changes to any of these files can affect the performance of Diplomat Remote Agent. **We strongly recommend that you set privileges on these directories to limit access** to only necessary applications, such as backup.
14. Send the password you entered to the Diplomat MFT administrator or copy the Diplomat MFT Public Key file (diplomatMFTPublicKey.asc) that you received from the Diplomat MFT administrator to *C:\ProgramData\Coviant Software\Diplomat-RemoteAgent\keys* after starting the service for the first time.

2.1.2 Repair (Update)

1. Log on to the system where Diplomat Remote Agent is to be reinstalled. You must use a Windows account with administrator privileges if you are reinstalling the Diplomat Remote Agent.
2. Go to the Coviant Software Support Portal at <https://www.coviantsoftware.com/support/> and log on using your organization's credentials. You can then download the installation file for Diplomat Remote Agent.
3. Stop the Windows service 'Diplomat Remote Agent 64'. You can manually start the service by running **services.msc**.

NOTE: To be sure that no jobs are queued or running before you stop the service, contact the Diplomat MFT administrator.

4. Double-click on the filename to start the installation. You can change an installation setting by selecting **Back** until you reach the previous window where the change is needed. Otherwise, select **Next** to continue to the next step. You can select **Cancel** at any time to stop the installation.
5. Select **Repair**.

6. If you want to continue to use your current `diplomatMFTPublicKey.asc` file, you do not need to create a new password. Otherwise, you can create a single-use password that allows a Diplomat MFT site to automatically install a new `diplomatMFTPublicKey.asc` file for you. If you enter a password, send the password to the Diplomat MFT administrator.
7. Click **Next** to start the installation and **Finish** when complete to exit the installer.
8. Start the Windows service 'Diplomat Remote Agent 64'. The Diplomat Remote Agent service is set to start automatically on reboot. You can manually start the service by running `services.msc`.

2.1.3 Remove

1. Log on to the system where Diplomat Remote Agent is to be removed. You must use a Windows account with administrator privileges if you are removing the Diplomat Remote Agent.
9. Stop the Windows service 'Diplomat Remote Agent 64'. You can manually start the service by running `services.msc`.
2. Run a saved installer or use the built-in Windows process to uninstall an application.
3. Select **Remove** and confirm that you want to completely remove Diplomat Remote Agent.
4. Click **Finish** to exit the installer.

2.1.4 Version Upgrade

Use the following instructions only if you are **upgrading** Diplomat Remote Agent to a new version.

1. Log on to the system where Diplomat Remote Agent is to be upgraded. You must use a Windows account with administrator privileges if you are reinstalling the Diplomat Remote Agent Service.
- 2.
3. Stop the Windows service 'Diplomat Remote Agent 64'. You can manually start the service by running `services.msc`.

NOTE: To be sure that no jobs are queued or running before you stop the service, contact the Diplomat MFT administrator.

4. Double-click on the filename to start the installation and follow the prompts to upgrade.
5. Click **Finish** to exit the installer.
6. Start the Windows service 'Diplomat Remote Agent 64'. The Diplomat Remote Agent service is set to start automatically on reboot. You can manually start the service by running `services.msc`.

2.2 Linux Installation

2.2.1 Initial Install

1. On the system where the Diplomat Remote Agent is being installed, create an operating system account with user name 'diplomat'. Log on with user name 'diplomat'. Create directory /opt/coviant/Diplomat-RemoteAgent to be used for installation and maintenance of the Diplomat Remote Agent.

NOTE: If you plan to use mapped drives or UNC paths when setting up file transfer jobs and access to the source and destination directories is restricted, the 'diplomat' account must have the required access privileges and you must set up the diplomatRemoteAgent daemon to run as the 'diplomat' account.

2. Go to the Coviant Software Support Portal at <https://www.coviantsoftware.com/support/> and log on using your organization's credentials. You can then download the compressed file for Diplomat Remote Agent.
3. Uncompress the file to /opt/coviant/Diplomat-RemoteAgent or corresponding directory for your installation to install the Diplomat Remote Agent software, which includes a Tomcat web server.
4. Copy the Diplomat MFT Site Public Key file (diplomatMFTPublicKey.asc) that you received from the Diplomat MFT administrator to /opt/coviant/Diplomat-RemoteAgent/keys or the corresponding directory for your installation.
5. Review the license agreement in the file named *Coviant Software Clickwrap License Agreement.pdf* in /opt/coviant/Diplomat-RemoteAgent/docs or corresponding directory for your installation. If you DO NOT agree with the license terms, DO NOT continue the installation. Continuing the installation indicates that you have accepted the license terms. You may want to print a copy of the license agreement for your records.
6. To set the diplomatRemoteAgent daemon for the Tomcat web server to start automatically on system reboot, log on as 'root'. Execute the setup script at /opt/coviant/Diplomat-RemoteAgent/setup or corresponding directory for your installation. This script copies the diplomatRemoteAgent daemon into the /etc/rc.d/init.d directory, which starts the diplomatRemoteAgent daemon on system startup.

You can use the following commands to check the status of or change the diplomatRemoteAgent daemon:

Command	Action
chkconfig --list	Display status of daemons, including diplomatRemoteAgent
chkconfig diplomatRemoteAgent on	Configure the diplomatRemoteAgent daemon to start automatically on reboot
chkconfig diplomatRemoteAgent off	Disable automatic start of diplomatRemoteAgent daemon on reboot
chkconfig --del diplomatRemoteAgent	Permanently delete diplomatRemoteAgent daemon
service diplomatRemoteAgent start	Manually start the diplomatRemoteAgent daemon
service diplomatRemoteAgent stop	Manually stop the diplomatRemoteAgent daemon
service diplomatRemoteAgent status	Check status of the diplomatRemoteAgent daemon

7. To start the diplomatRemoteAgent daemon, reboot the Linux system or use the 'service diplomatRemoteAgent start' command.

8. Confirm that the Diplomat Remote Agent service is listening properly on TCP port 8082. The Diplomat Remote Agent port is set to 8082 by default. If port 8082 is already in use, or if you wish to change it for some other reason, refer to [Changing Diplomat Services Port Numbers](#) article in the Knowledge Base.
9. Check to ensure that all firewall software is configured to allow the diplomatRemoteAgent daemon access to the Internet.
10. A new directory structure is created during the installation of Diplomat Remote Agent. If you selected the default installation location, this directory structure is located under /opt/coviant/Diplomat-RemoteAgent or the corresponding directory for your installation. These directories contain the Diplomat Remote Agent and various Diplomat databases. Changes to any of these files can affect the performance of Diplomat. **We strongly recommend that you set privileges on these directories to limit access** to only necessary applications, such as backup.

2.2.2 Diplomat Remote Agent Service Version Upgrade

1. On the system where the Diplomat Remote Agent Service is being updated, log on as 'root' or other account with 'root' privileges. Stop the diplomatRemoteAgent daemon by using the 'service diplomatRemoteAgent stop' command.

NOTE: When you stop the diplomatRemoteAgent daemon manually, it may not stop immediately. The system waits until all currently running jobs are completed before stopping the daemon.

2. On the system where the Diplomat Remote Agent Service is being updated, log on with user name 'diplomat'.
3. Go to the Coviant Software Support Portal at <https://www.coviantsoftware.com/support/> and log on using your organization's credentials. You can then download the compressed file for Diplomat Remote Agent.
4. Uncompress the file to /opt/coviant/Diplomat-RemoteAgent or a corresponding directory for your installation, which installs the Diplomat MFT Service software, a Java Runtime Environment (JRE), and the Tomcat web server.
5. Log on as 'root' or other account with 'root' privileges. To restart the diplomatRemoteAgent daemon, reboot the Linux system or use the 'service diplomatRemoteAgent start' command.
6. Confirm that the Diplomat Remote Agent service is listening properly on TCP port 8082. The Diplomat Remote Agent port is set to 8082 by default. If port 8082 is already in use, or if you wish to change it for some other reason, refer to [Changing Diplomat Services Port Numbers](#) article in the Knowledge Base.

2.2.3 Remove

1. Log on as 'root' or other account with 'root' privileges.
2. Stop the diplomatRemoteAgent daemon by using the 'service diplomatRemoteAgent stop' command.

NOTE: To be sure that no file transfer jobs are queued or running before you stop the service, contact the Diplomat MFT site administrator.

3. Execute the uninstall script at /opt/coviant/Diplomat-RemoteAgent/uninstall or the corresponding directory for your installation to remove the startup script for the diplomatRemoteAgent daemon.

NOTE: If you want to permanently uninstall Diplomat Remote Agent, including the Diplomat transaction database and other Diplomat files, you can delete the /opt/coviant/Diplomat-RemoteAgent directory and remove the 'diplomat' user account.

3 Configuration

After you complete the installation of Diplomat Remote Agent and **before you start the Diplomat Remote Agent service**, follow these steps to complete your configuration:

1. Provide file transfer set-up information to the Diplomat MFT administrator as follows:
 - Password entered during the Diplomat Remote Agent installation, if any.
 - External IP address or domain name for connections to the Diplomat Remote Agent.
NOTE: The system running the Diplomat Remote Agent must have a static IP address or domain name.
 - Port number used by the Diplomat Remote Agent site if different than the default 8082.
 - Root directory where Diplomat MFT reads or writes files.
NOTE: The root directory defaults to the documents directory of the network identity associated with the Diplomat Remote Agent Service. It is strongly recommended you select a permanent directory to replace the default directory.
 - Full pathnames for source and destination directories, so file transfer jobs initiated by the Diplomat MFT site can move files to and from locations on the Diplomat Remote Agent site's local network.
 - Whether temporary file names need to be used when writing files to the Diplomat Remote Agent site. Opt to use temporary file names when automated processes may attempt to pick up a new file before it has been completely written.
 - Whether files are automatically OpenPGP encrypted before transmission and automatically decrypted before being written to the destination location.
NOTE: This setting enforces PGP protection on all data transmissions – both inbound and outbound.
 - Whether to attempt checkpoint restart. Attempting to restart a file transmission at the point of failure is recommended if very large files are being transferred or if the connection between the Diplomat MFT site and the Diplomat Remote Agent site is not reliable.
2. If you did not enter a password during the Diplomat Remote Agent installation, request the Diplomat MFT site Public Key file (diplomatMFTPublicKey.asc) from the Diplomat MFT administrator and copy it to `C:\ProgramData\Coviant Software\Diplomat-RemoteAgent\keys`, `/opt/coviant/Diplomat-RemoteAgent/keys` or the corresponding directory for your installation.
NOTE: The ProgramData directory is a system folder and may be hidden by the operating system. To display the ProgramData directory and sub-directories, open Windows Explorer. Select 'Organize > Folder and search options' from the top menu. Select the View tab. Select 'Show hidden files, folders, and drives'.
3. If you have not already done so, assign the logon account for the Diplomat Remote Agent service the privileges required to read and write from the source and destination directories.
4. Start the Diplomat Remote Agent Service.

- On a Windows system, the Diplomat Remote Agent Service is set up automatically as a Windows service named Diplomat Remote Agent 64. The Diplomat Remote Agent Service is set to start automatically on reboot or you may manually start the service through **Services** under the Windows **Control Panel**.
 - On a Linux system, to set the diplomatRemoteAgent daemon to start automatically on system reboot, log on as 'root' and execute the setup script at /opt/coviant/Diplomat-RemoteAgent setup, which copies the diplomatRemoteAgent daemon into the /etc/rc.d/init.d directory. Or, start the service manually with the 'service diplomatRemoteAgent start' command.
5. Check with the Diplomat MFT administrator that the Diplomat Remote Agent site is working correctly. The Diplomat MFT administrator can test the connection to the Diplomat Remote Agent site and whether the source and destination directories exist. They can also review log files from the Diplomat Remote Agent site to diagnose any problems. These log files are available locally on the Diplomat Remote Agent site at *C:\ProgramData\Coviant Software\Diplomat-RemoteAgent\logs*, /opt/coviant/Diplomat-RemoteAgent/logs or the corresponding directory for your installation.

4 Appendix A: Glossary

Destination Directory – The directory on a Diplomat MFT site or Diplomat Remote Agent site where a file is to be written.

Diplomat MFT Administrator – Person administering the Diplomat MFT site and Diplomat MFT transaction database.

Diplomat Remote Agent – Java application that enables secure transfer of files including automated PGP encryption and decryption of files during transfer.

Diplomat MFT Service – Run-time engine that executes transactions stored in the Diplomat MFT transaction database and interfaces with FTP servers, mail servers, and other systems, as needed. The Diplomat MFT Service is implemented as a Windows service. After installation, the Windows operating system starts the Diplomat MFT Service, which then runs in the background creating jobs for each transaction. Plus, it creates a log file with system messages, an audit database, and archives transaction files, if desired.

Diplomat MFT Service Login – Windows login identity for the Diplomat MFT Service. Defaults to Local System.

Diplomat MFT Transaction Database – Contains all data needed to create and schedule jobs, including keys, partner profiles, transaction, and configuration data. The transaction database is comprised of a SQL database.

Firewall – A software program that protects computers on a network from unauthorized Internet access.

IP Address – The numerical identification of a computer connected to a network. The IP Address appears with periods separating groups of numbers. (i.e. 98.76.54.32).

File Transfer Job – A job is a particular execution of a transaction. For example, if a transaction is scheduled to run once a day, a new job will be created and executed once a day.

Log File – File containing chronological system messages generated as a result of Diplomat MFT operation.

OpenPGP – OpenPGP is one type of public key encryption technology. It is based on an asymmetric scheme that uses a pair of keys: a *public key*, which encrypts data, and a corresponding *private*, or *secret key* for decryption. The OpenPGP protocol, created by the Internet Engineering Task Force (IETF), defines standard formats for encrypted messages, signatures, private keys, and certificates for exchanging public keys.

OpenPGP Key Pair – OpenPGP keys are always created as key pairs with a public key and a private key. The owner of a key pair keeps their key pair and gives their trading partner their public key.

OpenPGP Public Key – The OpenPGP key that is made available to an organization's trading partners to be used to encrypt data that is sent from the trading partner to the organization.

Partner Profile – A set of information defining default parameters to be used when setting up a transaction with the trading partner.

PGP – An acronym for Pretty Good Privacy, an encryption application developed by Phil Zimmerman that utilizes asymmetrical or public/key pairs to encrypt and decrypt files. Trademarked by PGP Corporation.

Source Directory – The directory on Diplomat MFT site or Diplomat Remote Agent site where a file is to be picked up.