

Configuration Backup and Restore

For All Mediatrix Units

DGW 49.2.2941

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Basic Backup and Restore Concepts

Configuration Backup and Restore

Performing a configuration backup allows you to have a copy of the entire configuration at the time the backup was performed.

The configuration backup can be used:

- to revert the running configuration to a valid configuration when the running configuration generates error messages or no longer works;
- to deploy a valid configuration on other units;
- to revert to a known configuration when too many changes were made to the running configuration;
- to deploy a backup configuration on a replacement unit.

The configuration backup includes every aspects of the configuration, i.e.

- the status and configuration parameters;
- the certificates;
- the Rulesets.

But the configuration backup does not include the File service files, except for the Rulesets.

The configuration backup is an XML file and can, if necessary, be encrypted.

Note: Media5 corp strongly recommends to use a privacy algorithm (encryption) to protect certificates and passwords.

IMPORTANT: Do not edit the configuration image file as it may no longer work.

IMPORTANT: You can use a backup file on a unit with a newer or same firmware version than what is was taken from. A backup file can not be restored on an older firmware version than the one it was taken from.

IMPORTANT: The configuration image can only be restored on the same platform it was taken from.

Backup made on firmware version vX	Unit firmware version	Possible
Backup.v3	Firmware version 3	YES
Backup.v1	Firmware version 3	YES
Backup.v1	Firmware version 1	YES
Backup.v3	Firmware version 1	NO

The Configuration Back and Restore performed on Dgw v2.0.31 includes all Rulesets. However, starting on Dgw v.2.0.32 only the Rulesets modified by the user will be included in the configuration backup and restore. If a configuration backup is performed on Dgw v2.0.31 and restored on a newer version of DGW, all Rulesets existing in v2.0.31 will be copied as custom Rulesets i.e the system will not use the factory Rulesets of the newer version even if they were not modified.

Simple Network Time Protocol (SNTP)

The Simple Network Time Protocol (SNTP) is used to update and synchronise the clock of the Mediatrix unit (day, month, time) when it is restarted.

Mediatrix units do not all include a real time clock allowing them to maintain accurate time when they are shutdown. Your system needs to have access to accurate time, for example if you are using HTTPS or for the caller ID feature. The Mediatrix unit implements a SNTP client, which can synchronise the local clock with remote NTP/SNTP servers. The configuration can be automatic (through DHCP for example), with fallback, or static, with up to four servers.

File Servers

Configuring the FTP Server

Before you start

If you are not familiar with the procedure on how to set the FTP root path, please refer to your FTP server's documentation.

Information

Perform this procedure if you plan to use the FTP transport protocol.

Steps

- 1) Set an FTP service on the assigned server.
- 2) Make sure the FTP server can be reached by the Mediatrix unit.

Note: If the file server is located behind a firewall, make sure that TCP port 21 is open.

Next Step

[Performing a Configuration Backup to a File Server \(p.9\)](#)

[Restoring a Configuration From a File Server \(p.12\)](#)

Configuring the TFTP Server

Before you start

If you are not familiar with the procedure on how to set the TFTP root path, please refer to your TFTP server's documentation.

Information

Perform this procedure if you plan to use the TFTP transport protocol.

Steps

- 1) Set a TFTP service on the assigned server.
- 2) Make sure the TFTP server can be reached by the Mediatrix unit.

Note: If the file server is located behind a firewall, make sure the UDP port 69 is open.

Next Step

[Performing a Configuration Backup to a File Server \(p.9\)](#)

[Performing a Configuration Backup to the Unit File Management System \(p.10\)](#)

[Restoring a Configuration From a File Server \(p.12\)](#)

[Restoring a Configuration from the Unit File Management System \(p.13\)](#)

Configuring the HTTP Server

Before you start

If you are not familiar with the procedure on how to set the HTTP root path, refer to your HTTP server's documentation.

Information

Perform this procedure if you plan to use the HTTP transport protocol.

Steps

- 1) Set an HTTP service on the assigned server.
- 2) Make sure the HTTP server can be reached by the Mediatrix unit.

Note: If the file server is located behind a firewall, make sure the TCP port 80 is open.

Next Step

[Restoring a Configuration From a File Server \(p.12\)](#)

[Restoring a Configuration from the Unit File Management System \(p.13\)](#)

Configuring the HTTPS Server

Before you start

If you are not familiar with the procedure on how to set the HTTPS root path, please refer to your HTTPS documentation.

Make sure the unit is set to the proper date (refer to [Configuring the Mediatrix Unit to Use an SNTP Server \(p.8\)](#)).

Information

Perform this procedure if you plan to use the HTTPS transport protocol.

Steps

- 1) Set an HTTPS service on the assigned server.
- 2) Make sure the HTTPS server can be reached by the Mediatrix unit.

Note: If the file server is located behind a firewall, make sure the TCP port 443 is open.

- 3) Make sure that in the **Management/Certificates** tab, in the **Certificate Import Through Web Browser** table, there is a certificate that authenticates the HTTPS server selected in the **Path** field, and that **Other** is selected in the **Type** field.
- 4) Set the configuration parameters.

Next Step

[Configuring the Mediatrix Unit to Use an SNTP Server](#) (p.8)

Configuring the Mediatrix Unit to Use an SNTP Server

Before you start

Make sure there is an SNTP server available.

Information

Steps

- 1) Go to **Network/Host**.
- 2) In the **SNTP Configuration** table, from the **Configuration Source** selection list, select the connection type from which you wish to obtain the SNTP parameters.

Note: Complete [Step 3](#) only if you are using static SNTP server(s), otherwise go to [Step 4](#).

- 3) Provide an IP address or domain name and port numbers for each SNTP server you are using.
- 4) If necessary, change the displayed default value of the **Synchronisation Period**.
- 5) If necessary, change the displayed default value of the **Synchronisation Period on Error**.
- 6) Click **Apply**.

Result

The SNTP host name and port will be displayed in the **Host Status** table under **Network/Status**.

SNTP Configuration	
Configuration Source:	Automatic IPv4
Primary SNTP:	192.168.10.10:123
Secondary SNTP:	
Third SNTP:	
Fourth SNTP:	
Synchronization Period:	1440
Synchronization Period On Error:	60

Next Step

[Performing a Configuration Backup to a File Server](#) (p.9)

[Performing a Configuration Backup to the Unit File Management System](#) (p.10)

[Restoring a Configuration From a File Server](#) (p.12)

[Restoring a Configuration from the Unit File Management System](#) (p.13)

[Restoring a Configuration from Your PC](#) (p.14)

Basic Backup Tasks

Performing a Configuration Backup to a File Server

Before you start

Note: Only FTP and TFTP can be used to backup a configuration to a file server.

Depending on the type of transport protocol used, one of the following procedures must be completed:

- [Configuring the FTP Server](#) (p.6)
- [Configuring the TFTP Server](#) (p.6)

Steps

- 1) Go to **Management/Backup and Restore**.
- 2) In the **Image Configuration** table, in the **File Name** field, indicate the name of your backup.

Note: The file name is case sensitive. As a best practice, add the *.xml extension. Make sure to indicate the firmware version the backup was made from because a backup file can not be restored on an older firmware version than the one it was taken from.

Note: Remember, if you have several units with several configurations and plan to reuse the configuration on another unit, the name must be explicit. Indicate the date of your backup, the interfaces used, the device model, etc.

- 3) From the **Transfer Protocol** selection list, select the type of protocol you wish to use to transfer your backup.

Note: This must be consistent with the file server you have configured.

- 4) In the **Host Name** field, enter the file server IP address or FQDN.
- 5) In the **Location** field, enter the path relative to the root of the file server where the backup will be saved.
- 6) If your server requires authentication, enter your username and password.
- 7) From the **Content** selection list, choose the elements you wish to include to the backup.
- 8) If you wish to use encryption for backup operations, complete the **Privacy Parameters**.

Note: Media5 corp strongly recommends to use a privacy algorithm (encryption) to protect certificates and passwords.

- 9) Make sure the file server is started.
- 10) Click **Apply and Backup Now**.

Result

The configuration will be saved on the selected file server.

Note: In all cases, the configuration image file must not be edited by the user.

Image Configuration	
Transfer Parameters	
File Name:	yymmdd_device_name.xml --- Suggestion ---
Transfer Protocol:	FTP
Host Name:	file.server.com
Location:	configuration folder
User Name:	username
Password:	
Backup Parameters	
Content:	Config And Certificates
Privacy Parameters	
Privacy Algorithm:	None
Privacy Key:	

Performing a Configuration Backup to the Unit File Management System

Steps

- 1) Go to **Management/Backup and Restore**.
- 2) In the **File Name** field, indicate the name of your backup.

Note: The file name is case sensitive. As a best practice, add the .xml extension. Make sure to indicate the firmware version the backup was made from because a backup file can not be restored on an older firmware version than the one it was taken from.

Note: Remember, if you have several units with several configurations and plan to reuse the configuration on another unit, the name must be explicit. Indicate the date of your backup, the interfaces used, the device model, etc.

- 3) From the **Transfer Protocol** selection list, select **File**.
- 4) From the **Content** selection list, choose the elements you wish to include to the backup.
- 5) If you wish to use encryption for backup operations, complete the **Privacy Parameters**.

Note: Media5 corp strongly recommends to use a privacy algorithm (encryption) to protect certificates and passwords.

- 6) Click **Apply and Backup Now**.

Result

The configuration will be saved in the unit file management system. The backup file will appear at the end of the list of the **File** page, under **Management/File**.

Image Configuration	
Transfer Parameters	
File Name:	yymmdd_device_name.xml --- Suggestion ---
Transfer Protocol:	File
Host Name:	file.server.com
Location:	configuration folder
User Name:	username
Password:	
Backup Parameters	
Content:	Config And Certificates
Privacy Parameters	
Privacy Algorithm:	None
Privacy Key:	

Basic Restore Tasks

Restoring a Configuration From a File Server

Before you start

Depending on the type of transport protocol used, one of the following procedures must be completed:

- [Configuring the FTP Server](#) (p.6)
- [Configuring the TFTP Server](#) (p.6)
- [Configuring the HTTP Server](#) (p.7)
- [Configuring the HTTPS Server](#) (p.7)

Steps

- 1) Go to **Management/Backup and Restore**.
- 2) In the **File Name** field, indicate the name of your backup or use the **Suggestion** selection list.

Note: The file name is case sensitive. Remember that a backup file can not be restored on an older firmware version than the one it was taken from. The configuration image can only be restored on the same platform it was taken from.

- 3) From the **Transfer Protocol** selection list, select the type of protocol you wish to use to transfer your backup.

Note: This must be consistent with the file server you have configured.

- 4) In the **Host Name** field, enter the file server IP address or FQDN.
- 5) In the **Location** field, enter the path relative to the root of the file server where the backup will be saved.
- 6) If your server requires authentication, enter your username and password.
- 7) Make sure the file server is started.
- 8) If the backup file is encrypted, complete the **Privacy Parameters**.

Note: The privacy key must match the privacy key used to encrypt the backup file.

- 9) Click **Apply and Restore Now**.

Note: A pop-up message will be displayed indicating that the unit will be automatically restarted once the restore procedure is completed.

Result

The unit will be restarted. The configuration will be restored from the configured file server, and used as the running configuration.

Image Configuration	
Transfer Parameters	
File Name:	yymmdd_device_name.xml --- Suggestion --- ▼
Transfer Protocol:	FTP ▼
Host Name:	file.server.com
Location:	configuration folder
User Name:	username
Password:	••••••
Backup Parameters	
Content:	Config And Certificates ▼
Privacy Parameters	
Privacy Algorithm:	None ▼
Privacy Key:	

Restoring a Configuration from the Unit File Management System

Steps

- 1) Go to **Management/Backup and Restore**.
- 2) In the **File Name** field, indicate the name of your backup or use the **Suggestion** selection list.

Note: The file name is case sensitive. Remember that a backup file can not be restored on an older firmware version than the one it was taken from. The configuration image can only be restored on the same platform it was taken from.

- 3) From the **Transfer Protocol** selection list, select **File**.
- 4) If the backup file is encrypted, complete the **Privacy Parameters**.

Note: The privacy key must match the privacy key used to encrypt the backup file.

- 5) Click **Apply and Restore Now**.

Note: A pop-up message will be displayed indicating that the unit will be automatically restarted once the restore procedure is completed.

Result

The unit will be restarted. The configuration will be restored from the system's file management system, and used as the running configuration.

Image Configuration	
Transfer Parameters	
File Name:	yymmdd_device_name.xml --- Suggestion ---
Transfer Protocol:	File
Host Name:	file.server.com
Location:	configuration folder
User Name:	username
Password:	
Backup Parameters	
Content:	Config And Certificates
Privacy Parameters	
Privacy Algorithm:	None
Privacy Key:	

Restoring a Configuration from Your PC

Steps

- 1) Go to **Management/Backup and Restore**.
- 2) If the Web pages are not encrypted (HTTPS), click **Activate unsecure file importation from the Web browser**, located at the top of the tables.
- 3) In the **Transfer Scripts Through Web Browser** table, browse to the location of the file you wish to restore.

Note: The file name is case sensitive. Remember that a backup file can not be restored on an older firmware version than the one it was taken from. The configuration image can only be restored on the same platform it was taken from.

- 4) Click **Upload & Restore**.

Note: A pop-up message will be displayed indicating that the unit will be automatically restarted once the restore procedure is completed.

Result

The unit will be restarted. The configuration will be restored from your PC, and used as the running configuration.

Transfer Images Through Web Browser	
Upload Parameters (Clear Selection)	Upload & Restore
C:\Files\Backup\yymmdd_device_name.xml	Browse ...
Privacy Key:	

Parameters

Although the services can be configured in great part in the web browser, some aspects of the configuration can only be completed with the MIB parameters by:

- using a MIB browser, such as the Mediatrix Unit Manager Network (UMN);
- using the CLI;
- creating a configuration script containing the configuration parameters.

Advanced Backup and Restore Configuration Parameters

Although the services can be configured in great part in the Web browser, some aspects of the configuration can only be completed with the configuration parameters by :

- using a MIB browser
- using the CLI
- creating a configuration script containing the configuration parameters

Image Transfer Cipher Suite

For more details on the following parameters refer to [DGW Configuration Guide - Configuration Reference Guide](#) published on the [Media5 Documentation Portal](#). Refer to **Conf.ImageTransferCipherSuite**.

Image Transfer Tls Version

Refer to **Conf.ImageTransferTlsVersion**.

Online Help

If you are not familiar with the meaning of the fields and buttons, click **Show Help**, located at the upper right corner of the Web page. When activated, the fields and buttons that offer online help will change to green and if you hover over them, the description will be displayed.

DGW Documentation

Mediatrix devices are supplied with an exhaustive set of documentation.

Mediatrix user documentation is available on the [Media5 Documentation Portal](#).

Several types of documents were created to clearly present the information you are looking for. Our documentation includes:

- **Release notes:** Generated at each GA release, this document includes the known and solved issues of the software. It also outlines the changes and the new features the release includes.
- **Configuration notes:** These documents are created to facilitate the configuration of a specific use case. They address a configuration aspect we consider that most users will need to perform. However, in some cases, a configuration note is created after receiving a question from a customer. They provide standard step-by-step procedures detailing the values of the parameters to use. They provide a means of validation and present some conceptual information. The configuration notes are specifically created to guide the user through an aspect of the configuration.
- **Technical bulletins:** These documents are created to facilitate the configuration of a specific technical action, such as performing a firmware upgrade.
- **Hardware installation guide:** They provide the detailed procedure on how to safely and adequately install the unit. It provides information on card installation, cable connections, and how to access for the first time the Management interface.
- **User guide:** The user guide explains how to customise to your needs the configuration of the unit. Although this document is task oriented, it provides conceptual information to help the user understand the purpose and impact of each task. The User Guide will provide information such as where and how TR-069 can be configured in the Management Interface, how to set firewalls, or how to use the CLI to configure parameters that are not available in the Management Interface.
- **Reference guide:** This exhaustive document has been created for advanced users. It includes a description of all the parameters used by all the services of the Mediatrix units. You will find, for example, scripts to configure a specific parameter, notification messages sent by a service, or an action description used to create Rulesets. This document includes reference information such as a dictionary, and it does not include any step-by-step procedures.

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