1 Update the mGuard configuration using pull configuration

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Contents of this document

This document describes how to perform pull configuration for your mGuard device. It also describes how to obtain pull-config feedback from the server logs.

1.1 Introduction

An mGuard device can automatically “retrieve” new configuration profiles from a configuration pull server (*pull configuration*), provided that the corresponding profiles (with file extension *.atv*) have been stored there.

New configurations can be created and stored on the pull server using the mGuard device manager (mdm / FL MGUARD DM). The intervals at which new configurations are “retrieved” from the pull server can be configured on the mGuard device.

1.2 Configure pull configuration on the mGuard device

Proceed as follows to configure pull configuration on the mGuard device:

1. Log on to the web interface of the mGuard device.
2. Open **Management >> Central Management** (see also mGuard firmware manual).
3. Specify a schedule for the mGuard device to send a request to the pull server (*pull request*).
4. Make other settings, if required.

At the specified intervals, the mGuard device will attempt to “retrieve” new configurations from the pull server.

1.3 Pull configuration using mdm

Pull configuration (*pull configuration*) is one method for updating the configurations or the firmware version of an mGuard device using the mGuard device manager (mdm / FL MGUARD DM).

The configurations created in the mdm are first exported to the pull server and later "retrieved" by the mGuard device or uploaded to the device (see also mdm software manual).

The mGuard device sends the status of its configuration as a HTTP(S) request on every request to the pull server. The pull server then sends a SYSLOG message to the mdm server (*pull feedback*) in order to inform the mdm server about the configuration status of the mGuard device.

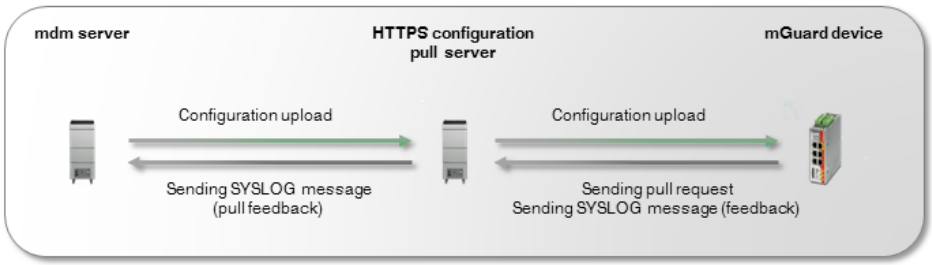

Figure 1-1 Pull configuration using mdm

Configure the mdm server to be able to receive SYSLOG messages from the HTTPS pull server.

Please make sure that neither the network connection between the HTTPS pull server and the mdm server nor the network connection between the HTTPS pull server and the mGuard device is blocked by a firewall or a NAT router.

1.4 Obtaine pull configuration feedback from server logs

In the event that communication from the configuration pull server to the mdm server is blocked due to firewall or NAT settings, the status of a *configuration pull* can also be obtained from the log entries of the pull server.

When an mGuard device retrieves a new configuration from the pull server, the mGuard device returns specific parameters (e.g., update status) as pull configuration feedback (*pull feedback*) in the form of an URL to the pull server (see the following Examples and Table 1-1). The pull server logs can be evaluated to verify whether the configuration pull was successful.

Examples

1. Configuration applied successfully:

"GET
//atv//00000001.atv?**a**=8.6.0.default&**b**=N205414313033131033abebcecfccecefcc&**c**=2031420608&**d**=e2adce0a1edd2c72e1910303f9d86925&**e**=0&**f**=-&**g**=-&**k**=-&**i**=0&**j**=0&**z**=1670 HTTP/1.1"

2. **Invalid configuration** (because of missing license for an activated function)**:**

"GET
//atv//00000001.atv?**a**=8.6.0.default&**b**=N205414313033131033abebcecfccecefcc&**c**=20
31420608&**d**=e2adce0a1edd2c72e1910303f9d86925&**e**=5&**f**=-&**g**=-&**k**=-
&**i**=0&**j**=0&**z**=71de HTTP/1.1"

Table 1-1 List of HTTP(S) request parameters evaluated by the mGuard device manager (mdm)

Parameter	Meaning	Status	Description
a	mGuard firmware version		Firmware version currently installed on the mGuard device
b	mGuard Flash ID		Flash ID of the mGuard device
c	mGuard device serial number		Serial number of the mGuard device
d	md5 hash of mGuard configuration		md5 hash value of the configuration currently used on the mGuard device
e	Update status of mGuard configuration (*configuration pull*)	**0**	The configuration on the mGuard device has been successfully updated.
		1	No update: The configuration on the mGuard device already is up to date.
e		**2**	No update: The new configuration could not be applied on the mGuard device. The previous configuration was restored (*rollback*).
		3	No update: The mGuard blocks the new configuration because it was restored (*rollback*) during a previous application attempt.
		4	No update: It was not possible to buffer the old configuration on the mGuard device for restoring (*rollback*) it later, which might be required.
		5	No update: The configuration that was to be used to update the mGuard device is invalid.
		-	No update: The configuration on the device should not be updated.
f	Status of the mGuard firmware update	**0**	The firmware update on the mGuard device was executed successfully.
		-	No update: A firmware update should not be executed on the device.

Table 1-1 List of HTTP(S) request parameters evaluated by the mGuard device manager (mdm)

		Any other character	No update: Firmware update failed
g	Status of license download	**0**	One or more licenses have been successfully installed on the mGuard device.
		-	A license should not be installed on the device.
		Any other character	Installation of the license failed
k	Status of *key renewal*	**0**	The keys (*ssh* and *https*) on the mGuard device have been successfully renewed.
		1	Key renewal failed
		2	Key renewal has not been executed Renewal is recommended because the current key might not be appropriately secure.
		-	Key renewal has not been executed

Further parameters (currently not guaranteed)

- **h** = Device type information; currently only set for NAT router devices. “h” is not transmitted on other devices.
- **i** = Redundancy: status of the password for *availability check*.
- **j** = Redundancy: status of the password for encryption of the network traffic between synchronized mGuard devices.
- **z** = 4 MSB (*Most Significant Bytes*) of the md5 hash value of meta information – without leading “?” and final “&” – but with linefeed character (0x0A) appended.