

Technical Support Note

Introduction to n-Command MSP

This Technical Support note is intended to provide an overview on the dashboard and how to create jobs on n-Command MSP.

ADTRAN's n-Command MSP is a suite of managed services, software, and network productivity tools for ADTRAN devices running ADTRAN Operating System (AOS). The system aids IT administrators in daily network operation and configuration allowing them to quickly adapt to networking changes, make better use of limited resources, evaluate network performance, and save time and money.

General n-Command MSP Widget Overview

Initial access to the dashboard is done via a web browser to the MSP server. The portal is setup with widgets to display important information:

Note: To ensure proper communication between the n-Command server and AOS devices, the Network Security Considerations from the <u>n-Command MSP Quick Start Guide</u> should be evaluated.

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- 1. For identifying newly discovered AOS units, check the **New Devices** widget
- 2. For finding AOS units running varied software revisions, check the **Software Revisions** widget
- 3. For checking on AOS units with alerts, use the **Device Alerts** widget

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2a. Hovering over **Software Revisions** pie chart displays additional info. Double clicking will display the **Devices** tab with all AOS units running that software release

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3a. The **Device Alerts** widget shows a number of different alarm indications that can be shown in more detail by selecting the appropriate icon

- 3b. The Gear icon displays Management Alerts
- 3c. The Caution icon displays Exception Alerts
- 3d. The IC Chip icon displays Alerts for software issues

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3e. Each alert is important, but the Management Alerts will be the most informative for device related issues. AOS units that missed check-ins may indicate an AOS unit is not connected to the network. Unsaved running configurations may cause service issues if the AOS units loses power or resets.

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On any screen in MSP, double clicking **System Name** opens up the specific AOS unit's device page.

Information is displayed on this screen for use in turn up and troubleshooting:

- 1. Uptime Total up time of the AOS unit
- 2. Firmware Info Current code (*Note: Primary and Backup mismatch can cause an alert*)
- 3. Auto-Link Info Shows Last and Next Updates (*Note: Missing Updates causes an alert*)

4. New Job – Scheduled task to Upgrade Firmware, Push config, Restore, or Reboot

Creating a New Job

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Jobs give the ability to do the following:

- 1. Add name and description
- 2. Provide notification on various conditions with a detailed log
- 3. Add users to receive email notification

👷 Favorites 🛛 🗧 Adtran nCommandMSP-2.1.0 (05/12/10 14:11 CDT)				
Open Tab V Dashboard p00a0c84d6315 New Firmware Job	✓ Settings	Help	Edit account (adtran)	Logout
New Firmware Job			Create	e Job
Notifications > Schedule > Tasks > Devices & Labels / Schedu 4 - - - - - -				
Specific time: 05/27/2010 7 1 39 pm				
Max Run Time: 3 A Hours 0 A Mins				

4. Set Jobs for Immediate or Scheduled execution (*Note: Selecting Immediate will immediately perform this job at the unit's next check-in. To bypass waiting for the next check-in time, Force check-in will make the device check-in and immediately perform the job*)

🔶 Favorites	🗧 Adtran nCe	ommandMSP-2.1.0 (05/12/10 14:11 CDT)			
Open Tab 🔻	Dashboard	p00a0c84d6315 New Firmware Job	Help	Edit account (adtran)	Logout
New	Firmwa	are Job		Create	e Job
	k Notifications 🧹	Schedule Tasks Devices & Labels			
Tasks Rebo	5.1	Y Push Config 🗹 Push Firmware Drag task titles below to rearrange them.			
Upgrade	Firmwa				
	Device Group:	TA 900e Gen2 V			
Pr	rimary Firmware:	A2.06.00.SB.E			
B	ackup Firmware:	Replace with primary			
	Write Config:				
Firmw	are Destination:	NONVOL			
Push Cor	nfiguration				

5. Add tasks to execute. In Firmware, use Drop down boxes to select Firmware to load. Select Checkbox for Write Config to save any provisioning.

en Tab Dashboard p00a0c84d6315 New Firmware Job	← Settings Help Edit account (adtran)
New Firmware Job	Create 1
General & Notifications 🧹 🔰 Schedule 🥢 🎽 Tasks 🧹 🎽 Devices & Labels 🥢	
6.1	
Restore V Push Config V Push Firmware Drag task titles below to rearrange them.	
Upgrade Firmware	
Push Configuration	
hostname "p00a0c84d6315"	
enable password md5 encrypted d1c9922db11f962823938bf212a480df	
clock timezone -5-Eastern-Time	
ervice password-encryption	
username "admin" password encrypted "1b137789801b01b70e1b0fc983ce3e214e68"	
banner motd	
WARNING	
This system is solely for the use of authorized Comcast employees and	
contractors. Comcast reserves the right at any time to monitor usage of this	
system to ensure compliance with this policy, all applicable Comcast policies	
that apply to electronic communications, and all applicable laws. Your use of this system constitutes your acceptance of and agreement to all applicable	
Concast electronic communications policies, your consent to monitoring by	
Comcast, and your express agreement to use this system in compliance with all	
applicable laws. Any unauthorized use of or access to this system may result	
in a revocation of your user privileges, other disciplinary action up to and	
including termination of employment or contract, or referrals to law enforcement officials including the provision evidence of any unauthorized use	
enforcement officials including the provision evidence or any unautopated use	
snmp-server location "Keller Williams Orange Park	

- 6. Each task has its own window for specifics relating to the task. Push Configuration allows a cut and paste of configuration changes, such as adding ACLs or enabling services to load for the unit. The script should be pasted as though at the Router(config)# prompt.
- 7. Click on Save config after checkbox to be sure it is saved.

Favorites Add	mandMSP-2.1.0 (05/12/10 14:11 CDT	7			
en Tab 🔹 🔰 pard	p00a0c84d6315 New Firmw.	are Job		✓ Settings Edit account (adtr. 8	an) Logo
New Firmwa	re Job				Create Job
General & Notifications 🧳	Schedule 🧹 💙 Tasks	🎸 📏 Devices & Labels 🧹			
Targets					
Run on ALL devices					
1 Device No Labels					
Add Devices Delete	Selected				
Hostname	Туре	Serial Number	Firmware	Primary F/W Image	
p00a0c84d6315	908e Gen2	CFG0770028	A2.06.00.SB.E	T900E2A-A2-06-00-SB-E	
1					

- 8. Once the Tasks are defined, the final step is to Create Job. This will schedule and execute the job based on information selected in previous screens. (*Note: Jobs are run based on the next auto-link check-in by the end device. A job will fail if the target device is missing check-ins or does not check-in during the job's configured window*)
- 9. Scheduled Jobs can be viewed in the **Open Tab** \rightarrow **Jobs** screen from the Top Tabs

avorites 🧲 Adtran nCo	ommandMSP-2.1.0 (05/12/10 14:11	CDT)		
1 Tab 🔻 Dashboard	p00a0c84d6315			✓ Settings Help Edit account (adtran) Log
00a0c84d		0	nstall Config Force Checkin Web Ir	nterface Refresh VQM 🗢 SNMP Alerts 🔫 New Job
ummary VQM Statist	tics Backup Files			
ackup Points	Colored items have changed	since last Backup		Download Selected File Download All Files
24/2010 - 5:13 PM	Path	▲ Name	Size	Modified On
	NONVOL:	startup-config	6.27 KB	Thu May 27 18:55:12 GMT-0400 2010
24/2010 - 5:27 PM	NONVOL:	startup-config.bak	6.49 KB	Thu May 27 18:55:12 GMT-0400 2010
27/2010 - 4:57 PM				

10. Another valuable tab in the unit screen is Backup Files. This will allow you to restore a configuration if the unit onsite ever have a catastrophic failure and needs to be replaced. (*Note: Multiple backups are stored every time the device checks-in and its configuration has a different checksum than the last stored backup file.*)