



AT-S85 and AT-S97 Version 3.0.0 Management Software for the AT-MCF2000 Media Converter Series Software Release Notes

Please read this document before you begin to use the management software.

Supported Platforms

This release of the AT-S85 and AT-S97 Management Software supports the AT-MCF2000 Series modules listed here:

AT-S85 Management Software	AT-MCF2012LC Fast Ethernet Media Converter Module
	AT-MCF2012LC/1 Fast Ethernet Media Converter Module
	AT-MCF2032SP Fast and Gigabit Ethernet Media Converter Module
AT-S97 Management Software	AT-MCF2000M Management Module

In addition to the software release notes, this release includes the four software files listed here:

AT-S85 Version 3.0.0 management software image file	This file is the new management software for the AT-MCF2012LC, AT-MCF2012LC/1 and AT-MCF2032SP Media Converter Modules.
AT-S97 Version 3.0.0 management software image file	This file is the new management software for the AT-MCF2000M Management Module.
AT-S97 Version 3.0.0 bootloader file	This file is a new bootloader for the AT-MCF2000M Management Module.
AT-MCF2000 Series MIB file	This file is used to manage the media converter modules with a SNMP application. To use the file, you must compile it into your SNMP application. For instructions, refer to the documentation that comes with the application.

The individual files are easy to identify. The filename of the new AT-S85 Management Software contains 'S85' and has the extension '.img'. The filenames of the two new AT-S97 files contain 'S97' and have the extensions '.img' for the image file and '.bin' for the bootloader.

Note:

This release does not include a new bootloader file for the AT-MCF2012LC and AT-MCF2012LC/1 Media Converter Modules. The modules should use bootloader Version 1.4.0.

Product Documentation

For the hardware installation and management instructions, refer to the following guides on the Allied Telesis web site at www.alliedtelesis.com:

- ❑ *AT-MCF2000 Media Converter Series Installation Guide* (PN 613-001052)
- ❑ *AT-S85 and AT-S97 Version 3.0.0 Management Software Command Line User's Guide* (PN 613-000789)

What's New in Version 3.0.0

The AT-S85 and AT-S97 Version 3.0.0 Management Software programs support these new hardware components.

- ❑ **AT-MCF2300 Chassis** - Features slots for four media converter modules, the AT-MCF2000M Management Module or the AT-MCF2000S Stacking Module, and primary and redundant power supplies.
- ❑ **AT-MCF2032SP Media Converter Module** - Features twelve Fast and Gigabit Ethernet channels consisting of 10/100/1000Base-T ports and SFP slots for 100Base or 1000Base SFP modules.

Note:

The AT-MCF2000M Management Module must have Version 3.0.0 of the AT-S97 Management Software and the AT-S97 bootloader to be fully compatible with the new chassis and the new media converter module. Managing these devices with earlier versions of the AT-S97 Management Software or bootloader may result in compatibility problems.

This release does not support Secure digital memory cards or Operations, Administration, and Maintenance (OAM). It also does not support Xmodem uploads, but it does allow for Xmodem downloads using the FILE FASTDOWNLOAD command.

Known Issues

There are no known issues to this release.

Resolved Issues

The following issues were resolved in this release:

- ❑ Redundant Temperature Exceed Limit message. Instead of generating a single clear message when the operating temperature returned below a module's temperature threshold, the management software generated two messages. The management module now generates a single clear message when the operating temperature of a module returns below the designated threshold. (5819)
- ❑ Missing Temperature Exceed Limit message. If, after the temperature threshold of a module was exceeded, the management module was reset, the module did not log a new Temperature Exceed Limit message in the event log after the reset. When reset, the management module now logs a Temperature Exceed Limit message if it detects that a module's temperature is above the designated threshold. (5820)

Operational Note

If you use an SNMP program to configure the MIB objects of the twisted pair ports on a media converter module, the ports must have valid links to end nodes. The MIB objects are not adjustable with an SNMP program when the ports do not have valid links. (6836, 6837)

Features History

This section lists the history of the AT-S85 and AT-S97 Management Software's features.

Version 2.0.0

- ☐ Support for Simple Network Management Protocol (SNMP), versions SNMPv1 and SNMPv2c

Version 1.4.0

- ☐ Stacks of up to sixteen media converter modules
- ☐ Support for Xmodem downloads

Version 1.3.0

- ☐ Control over the operating parameters of the twisted pair and fiber optic ports of the media converter channels, including:
 - Auto-Negotiation
 - Speed
 - Duplex mode
 - MDI/MDI-X configuration
- ☐ Selection of a channel's operating mode:
 - MissingLink™
 - Smart MissingLink
 - Link Test
- ☐ Rate limits for the ingress and egress packets on the ports of the media converter channels.
- ☐ Network Time Protocol (NTP) client for setting the system's date and time from a NTP server on your network or the Internet.
- ☐ Telnet server for remote management without encryption from a management station on your network.
- ☐ Secure Shell (SSH) server for remote management with encryption.
- ☐ Event log for monitoring the operations of the modules.
- ☐ Syslog client for transmitting event messages to a Syslog server.

Upgrading the AT-S85 and AT-S97 Management Software

This section contains the guidelines, the requirements, and the recommended steps to updating the AT-S85 Management Software on the AT-MCF2012LC and AT-MCF2012LC/1 Media Converter Modules, and the AT-S97 Management Software and bootloader on the AT-MCF2000M Management Module.

Note:

The new AT-MCF2032SP Media Converter Module comes with Version 3.0.0 management software.

Guidelines

Here are the guidelines for upgrading the management software programs on the AT-MCF2012LC and AT-MCF2012LC/1 Media Converter Modules and the AT-MCF2000M Management Module.

Note:

The upgrade process is disruptive to the operations of your network because the AT-MCF2012LC and AT-MCF2012LC/1 Media Converter Modules stop forwarding network traffic. To minimize the impact to you network, you should perform the procedure during periods of low network activity.

- ❑ Upgrading a single media converter module takes about three minutes.
- ❑ Upgrading the AT-MCF2000M Management Module takes about two and a half minutes.
- ❑ There are four versions of the AT-S85 and AT-S97 Management Software programs. They are Versions 1.3.0, 1.4.0, 2.0.0, and 3.0.0. The versions must be installed in sequence. Skipping a version may damage a module. For example, a media converter module or a management module that has Version 1.4.0 of the management software must be upgraded to Version 2.0.0 before it is upgraded to Version 3.0.0. All of the versions are available on the Allied Telesis web site.
- ❑ To upgrade the media converter modules, the version numbers of their AT-S85 Management Software programs must be the same as the version number of the AT-S97 Management Software on the AT-MCF2000M Management Module. Otherwise, the upgrade procedure may not work. In some situations, this may require downgrading the software on the management module. For instance, to upgrade media converter modules that have Version 1.4.0 of the AT-S85 Management Software with a management module that has Version 2.0.0 of the AT-S97 Management Software, you would first have to downgrade the management module to Version 1.4.0.
- ❑ If you need to downgrade the AT-S97 Management Software on the AT-MCF2000M Management Module, be sure to install the software images in sequence. For example, to downgrade the module from Version 3.0.0 to Version 1.4.0, you must first install Version 2.0.0 and then Version 1.4.0. If the module contains the new Version 3.0.0 bootloader, you do not have to downgrade the bootloader. It is compatible with the older versions of the AT-S97 Management Software.
- ❑ When upgrading the AT-MCF2000M Management Module to Version 3.0.0, install the new bootloader first and then the management software.

- ❑ This release does not include a new bootloader file for the AT-MCF2012LC and AT-MCF2012LC/1 Media Converter Modules. The modules should use bootloader Version 1.4.0.
- ❑ The new AT-MCF2032SP Media Converter Module ships with Version 3.0.0. Loading an earlier version of the software may damage the module.
- ❑ The AT-MCF2000S Stacking Module does not use management software.

Requirements

Here are the requirements for the upgrade:

- ❑ The 10/100/1000Base-T port on the AT-MCF2000M Management Module must be connected to your network.
- ❑ The management card must have an IP address.
- ❑ There must be a TFTP server on your network.
- ❑ The new management software files must be stored on your TFTP server.

Determining the Version Numbers of the Management Software Programs

Before you begin the upgrade process, use the SYSTEM SHOW CLUSTER command to determine the version numbers of the AT-S85 Management Software on the AT-MCF2012LC and AT-MCF2012LC/1 Media Converter Modules, and the AT-S97 Management Software on the AT-MCF2000M Management Module. The command lists all of the modules in the chassis or stack and the version numbers of their management software programs.

Here is an example of the display.

Chassis ID	Chassis Name	Chassis Type	MAC Address	Master Chassis																									
0	AQ Traffic	AT-MCF2000	11:22:33:44:55:55	Yes																									
<div> <div>AT-MCF2000</div> <table> <tr> <th>slot ID</th><th>Module Name</th><th>Module Type</th><th>Cfg Overwrite</th><th>Software Version</th></tr> <tr> <td>M</td><td></td><td>AT-MCF2000M</td><td></td><td>v2.0.0</td></tr> <tr> <td>1</td><td>Reg 1 traf</td><td>AT-MCF2012LC</td><td>Enable</td><td>v2.0.0</td></tr> <tr> <td>2</td><td>Reg 2 traf</td><td>AT-MCF2012LC/1</td><td>Enable</td><td>v2.0.0</td></tr> </table> </div>					slot ID	Module Name	Module Type	Cfg Overwrite	Software Version	M		AT-MCF2000M		v2.0.0	1	Reg 1 traf	AT-MCF2012LC	Enable	v2.0.0	2	Reg 2 traf	AT-MCF2012LC/1	Enable	v2.0.0					
slot ID	Module Name	Module Type	Cfg Overwrite	Software Version																									
M		AT-MCF2000M		v2.0.0																									
1	Reg 1 traf	AT-MCF2012LC	Enable	v2.0.0																									
2	Reg 2 traf	AT-MCF2012LC/1	Enable	v2.0.0																									
1	UJ Traffic		11:22:33:44:66:77	No																									
<div> <div>AT-MCF2300</div> <table> <tr> <th>slot ID</th><th>Module Name</th><th>Module Type</th><th>Cfg Overwrite</th><th>Software Version</th></tr> <tr> <td>1</td><td>District 1</td><td>AT-MCF2012LC</td><td>Enable</td><td>v2.0.0</td></tr> <tr> <td>2</td><td>District 2</td><td>AT-MCF2012LC</td><td>Enable</td><td>v2.0.0</td></tr> <tr> <td>3</td><td>District 3</td><td>AT-MCF2012LC</td><td>Enable</td><td>v2.0.0</td></tr> <tr> <td>4</td><td>District 4</td><td>AT-MCF2012LC/1</td><td>Enable</td><td>v2.0.0</td></tr> </table> </div>					slot ID	Module Name	Module Type	Cfg Overwrite	Software Version	1	District 1	AT-MCF2012LC	Enable	v2.0.0	2	District 2	AT-MCF2012LC	Enable	v2.0.0	3	District 3	AT-MCF2012LC	Enable	v2.0.0	4	District 4	AT-MCF2012LC/1	Enable	v2.0.0
slot ID	Module Name	Module Type	Cfg Overwrite	Software Version																									
1	District 1	AT-MCF2012LC	Enable	v2.0.0																									
2	District 2	AT-MCF2012LC	Enable	v2.0.0																									
3	District 3	AT-MCF2012LC	Enable	v2.0.0																									
4	District 4	AT-MCF2012LC/1	Enable	v2.0.0																									

The example is from a stack with an AT-MCF2000 Chassis and an AT-MCF2300 Chassis. The “Software Version” column displays the version numbers of the AT-S85 and AT-S97 Management Software on the modules.

Note the following:

- ❑ If the AT-MCF2000M Management Module and all of the media converters have Version 2.0.0 of their respective management software programs, upgrade the media converter modules first, as explained in “Upgrading the AT-S85 Management Software on the Media Converter Modules” on page 7. Afterwards, upgrade the bootloader and management software on the management module, as described in “Upgrading the AT-S97 Bootloader on the AT-MCF2000M Management Module” on page 8 and “Upgrading or Downgrading the AT-S97 Management Software on the AT-MCF2000M Management Module” on page 8.
- ❑ If one or more of the media converter modules have an earlier version of the management software than the management module, you must downgrade the management module to the same version and then upgrade the media converter modules. For example, if the media converter modules have Version 1.4.0 while the management module has Version 2.0.0, do the following:
 1. Downgrade the AT-S97 Management Software on the AT-MCF2000M Management Module to Version 1.4.0.
 2. Upgrade the AT-S85 Management Software on the media converter modules from Version 1.4.0 to Version 2.0.0.
 3. Upgrade the AT-S97 Management Software on the AT-MCF2000M Management Module from Version 1.4.0 to 2.0.0.
 4. Upgrade the AT-S85 Management Software on the media converter modules from Version 2.0.0 to Version 3.0.0.
 5. Upgrade the bootloader on the AT-MCF2000M Management Module from Version 1.4.0 to 3.0.0.
 6. Upgrade the AT-S97 Management Software on the AT-MCF2000M Management Module from Version 2.0.0 to 3.0.0.
- ❑ If the management module has an earlier version of the software than the media converter modules, you'll first need to upgrade its management software to the same version as the media converter modules. For example, if the management module has Version 1.4.0 and the media converter modules have Version 2.0.0, do the following:
 1. Upgrade the AT-S97 Management Software on the AT-MCF2000M Management Module from Version 1.4.0 to 2.0.0.
 2. Upgrade the AT-S85 Management Software on the media converter modules from Version 2.0.0 to Version 3.0.0.
 3. Upgrade the bootloader on the AT-MCF2000M Management Module from Version 1.4.0 to 3.0.0.
 4. Upgrade the AT-S97 Management Software on the AT-MCF2000M Management Module from Version 2.0.0 to 3.0.0.
- ❑ Versions 1.4.0 of the AT-S85 and AT-S97 Management Software programs have new bootloader files. When upgrading a media converter module or the AT-MCF2000M Management Module from Version 1.3.0 to 1.4.0, install the Version 1.4.0 bootloader first and then the Version 1.4.0 management software.

Upgrading the AT-S85 Management Software on the Media Converter Modules

The AT-S97 Management Software on the AT-MCF2000M Management Module has two commands for updating the AT-MCF2012LC and AT-MCF2012LC/1 Media Converter Modules from Version 2.0.0 to 3.0.0. The first command is the FILE FASTDOWNLOAD command which lets you update all of the media converter modules in the chassis or stack simultaneously. You could use this command if all of the media converter modules already have Version 2.0.0 and you want to update all of them to Version 3.0.0.

Here is the TFTP format of the command. (There is also a Xmodem version, which is described in the *AT-S85 and AT-S97 Management Software Command Line User's Guide*.)

```
file fastdownload appblock srcfile=tftp://ipaddress/filename.img
```

The *ipaddress* parameter specifies the IP address of the TFTP server on your network and the *filename.img* parameter is the filename of the new AT-S85 Management Software on the server. Here is an example of the command. The IP address of the TFTP server is 149.11.124.2 and the name of the file is ATS85_V300.img:

```
file fastdownload appblock srcfile=tftp://149.11.124.2/ats85_v300.img
```

When you enter this command, the management module queries your network for the TFTP server and requests the file. After receiving the file, the module sends it over the backplane in the chassis and out its Stack port to all of the media converter modules in the enclosure or stack.

If you need to update some but not all of the media converter modules, then the command you'll want to use is the FILE DOWNLOAD command, which lets you update the media converter modules individually and which has this format:

```
file download srcfile=tftp://ipaddress/filename.img
dstfile=system://chassis/slot/appblock
```

The *ipaddress* parameter and the *filename.img* parameter perform the same function here as they do in the FILE FASTDOWNLOAD command. They specify the IP address of the TFTP server on your network and the filename of the AT-S85 Management Software that you want to download from the server to the modules.

The *chassis* parameter is the ID number of the chassis containing the module you want to update. The chassis ID number for an enclosure that has the AT-MCF2000M will be either 0 or 31. An enclosure that has the AT-MCF2000S Stacking Module can have an ID number of 1 to 30. (For more information about chassis ID numbers, refer to the *AT-MCF2000 Media Converter Series Installation Guide* or the *AT-S85 and AT-S97 Management Software Command Line User's Guide*.)

This example of the command downloads a new version of the AT-S85 Management Software to the media converter module in slot 1 in a chassis with the ID 0. The IP address of the TFTP server is 150.24.44.65 and the name of the file is "ats85.img:"

```
file download srcfile=tftp://150.24.44.65/ats85.img
dstfile=system://0/1/appblock
```

For more information on the commands described here, refer to the *AT-S85 and AT-S97 Management Software Command Line User's Guide*.

Upgrading the AT-S97 Bootloader on the AT-MCF2000M Management Module

The command for upgrading the bootloader on the management module is the FILE DOWNLOAD command, the same command used to update the media converter modules. The format is the basically the same, with a couple of changes. First, the *slot* parameter is replaced with the letter 'm' to designate the slot for the management module and, second, the 'appblock' value is replaced with 'bootblock' to designate the part of flash memory reserved for the bootloader:

```
file download srcfile=tftp://ipaddress/filename.bin
dstfile=system://chassis/m/bootblock
```

This example of the command downloads the new bootloader to the management module in a chassis with the ID 0. The IP address of the TFTP server is 150.24.44.65 and the name of the file is "ats97_boot_v3.bin:"

```
file download srcfile=tftp://150.24.44.65/ats97_boot_v3.bin
dstfile=system://0/m/bootblock
```

Upgrading or Downgrading the AT-S97 Management Software on the AT-MCF2000M Management Module

The command for upgrading or downgrading the AT-S97 Management Software on the management module is also the FILE DOWNLOAD command. Here is the format.

```
file download srcfile=tftp://ipaddress/filename.img
dstfile=system://chassis/m/appblock
```

This example of the command downloads a new version of the AT-S97 Management Software to a management module in a chassis with the ID 0. The IP address of the TFTP server is 150.24.44.65 and the name of the file is "ats97_v3.img:"

```
file download srcfile=tftp://150.24.44.65/ats97_v3.img
dstfile=system://0/m/appblock
```

Examples

Here are two examples of the upgrade procedure. In this first example all of the media converter modules in the chassis or stack and the AT-MCF2000M Management Module already have Version 2.0.0 of the management software programs. Since the media converter modules and the management module all have Version 2.0.0, you can upgrade all of the modules directly to Version 3.0.0 without having to downgrade the management module.

1. The first step is to update the media converter modules. Because all of the modules in the chassis or stack will be updated, you can use the FILE FASTDOWNLOAD command. In the example, the TFTP server has the IP address 149.22.112.18 and the name of the file on the server is 'ats85_v300.img'. Here is the command to update the media converter modules:

```
file fastdownload appblock srcfile=tftp://149.22.112.18/ats85_v300.img
```

After the management card receives the file from the TFTP server, it transmits it over the backplane and, if it is part of a stack, out its Stack port to all of the media converter modules, which write the file to their flash memory and then reset. The entire process can take several minutes.

2. After all of the media converter modules are updated to Version 3.0.0, you can update the management module. The first step is to update its bootloader with the FILE DOWNLOAD command. In this example, the name of the file on the TFTP server is 'ats97_boot_v3.bin':


```
file download srcfile=tftp://149.22.112.18/ats97_boot_v3.bin
dstfile=system://0/m/bootblock
```

3. The last step is to install the new AT-S97 Management Software on the management module. This example assumes that the name of the file on the TFTP server is 'ats97_v3.img':

```
file download srcfile=tftp://149.22.112.18/ats97_v3.img
dstfile=system://0/m/appblock
```

In this example, the management module and most of the media converter modules have Version 2.0.0 of their management software, except for one media converter module that has Version 1.4.0. Since there is a media converter module with an earlier version of the management software than the management module, it will be necessary to downgrade the management module. Here are the upgrade steps:

1. The first step is to downgrade the management module from Version 2.0.0 to 1.4.0 so that you can upgrade the one media converter module that has Version 1.4.0 of the AT-S85 Management Software. This example assumes that the TFTP server has the IP address 124.112.74.12 and the name of the file on the server is 'ats97_v140.img'. Here is the command to downgrade the management module:

```
file download srcfile=tftp://124.112.74.12/ats97_v140.img
dstfile=system://0/m/appblock
```

2. After downgrading management module, you upgrade the media converter module. This command assumes that the module you want to upgrade is located in slot 2 of a chassis with the ID 0. The name of the file is 'ats85_app_v200.img':

```
file download srcfile=tftp://124.112.74.12/ats85_app_v200.img
dstfile=system://0/2/appblock
```

3. After upgrading the media converter module to Version 2.0.0, you upgrade the management module back to Version 2.0.0, as well. This command assumes that the name of the file is 'ats97_app_v200.img':

```
file download srcfile=tftp://124.112.74.12/ats97_app_v200.img
dstfile=system://0/m/appblock
```

4. This command updates the media converter modules to Version 3.0.0 of the AT-S85 Management Software using the FILE FASTDOWNLOAD command. The name of the file is 'ats85_v300.img';

```
file fastdownload appblock srcfile=tftp://124.112.74.12/ats85_v300.img
```

5. This command updates the bootloader on the management module to Version 3.0.0. The name of the file is 'ats97_boot_v3.bin':

```
file download srcfile=tftp://124.112.74.12/ats97_boot_v3.bin
dstfile=system://0/m/bootblock
```

6. This command updates the AT-S97 Management Software on the management module to Version 3.0.0. The name of the file is 'ats97_v3.img':

```
file download srcfile=tftp://124.112.74.12/ats97_v3.img
dstfile=system://0/m/appblock
```

Corrections to the *AT-S85 and AT-S97 Management Software Command Line User's Guide*

- ❑ If you use the Mode Select button on a media converter module to change the operating mode of a media converter channel, the module automatically updates its auxiliary configuration file to retain the change. However, the management module does not update the master configuration file. To update the master configuration file, you must use the CONFIG SAVE command. This is not mentioned in the description of the configuration files starting on page 146 in the user's guide.
- ❑ The description of the CONFIG OVERWRITE command on page 158 incorrectly states that the default setting for a module's overwrite setting is enabled. The actual default setting is disabled. At the default setting, a media converter module configures its parameter settings from its auxiliary configuration file when it is reset or powered on. To instruct a media converter module to use the master configuration file on the management module instead of its auxiliary configuration file to set its parameters, change the module's overwrite setting to enabled.

History of Resolved Issues

This section lists the history of the AT-S85 and AT-S97 Management Software's resolved issues.

Version 2.0.0

The following issues were resolved in AT-S85 and AT-S97 Version 1.4.0:

- ❑ Management Accessibility. After several days of continuous operations, the management software would stop responding to commands and would display the message "ipc_sock.c 882. Connect Failed: Resource temporarily unavailable." (5809)
- ❑ Stacking Chassis Display. The SYSTEM SHOW CLUSTER command failed to display all of the enclosures in a stack after the management software was updated. (5823)
- ❑ Console Timer. The console timer wasn't working. (5760)
- ❑ SYSTEM SHOW INTERFACE Command. This command did not return an error message if you entered an invalid ID value. (5829)

Version 1.4.0

The following issues were resolved in AT-S85 and AT-S97 Version 1.4.0:

- ❑ Temperature Threshold. The SYSTEM SET MODULE command did not return an error message if you omitted the ID parameter. (5812)
- ❑ Clear Trap. If a module's temperature threshold was exceeded, the management module would generate a Clear Trap message before the temperature returned below the threshold. (5819)

Version 1.3.0

The following issues were resolved in AT-S85 and AT-S97 Version 1.3.0.

- ❑ None

Contacting Allied Telesis

This section provides Allied Telesis contact information for technical support as well as sales or corporate information.

Online Support

You can request technical support online by accessing the Allied Telesis Knowledge Base: **www.alliedtelesis.com/support/kb.aspx**. You can use the Knowledge Base to submit questions to our technical support staff and review answers to previously asked questions.

Email and Telephone Support

For Technical Support via email or telephone, refer to the Support section of the Allied Telesis web site: **www.alliedtelesis.com**.

Returning Products

Products for return or repair must first be assigned a return materials authorization (RMA) number. A product sent to Allied Telesis without an RMA number will be returned to the sender at the sender's expense. For instructions on how to obtain an RMA number, go to the Support section on our web site at **www.alliedtelesis.com**.

Sales or Corporate Information

You can contact Allied Telesis for sales or corporate information through our web site at **www.alliedtelesis.com**.

Management Software Updates

New releases of the management software for our managed products are available from the following Internet sites:

- ☐ Allied Telesis web site: **www.alliedtelesis.com**
- ☐ Allied Telesis FTP server: **<ftp://ftp.alliedtelesis.com>**

If the FTP server prompts you to log on, enter "anonymous" as the user name and your email address as the password.

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