



Technical Overview

IMC Configuration Control Feature

For Products: iMcV-LIM, IE-iMcV-MediaLinX , IE-iMcV-Gigabit , IE-T1/E1/J1-LineTerm TP/ SFP, IE-T1/E1/J1-LineTerm TP/ fiber, iMcV-Giga-MediaLinX-TX/SFP, iMcV-10G-Converter

Configuration Control and SNMP Management

IMC Networks made a concerted effort two years ago to offer Configuration Control on many of the new iMcV-Modules it has designed. As the need for SNMP has grown, many network administrators who own the iMediaChassis series are installing an SNMP Management Module, in order to manage and monitor IMC devices in the network. Some iMcV-Modules offer Configuration Control; labels on the front faceplate will identify if the iMcV-module has Configuration Control. Configuration Control has been implemented to assist the end user for the following:

- Any module, iMcV-module or SNMP Management module, can be changed under power without losing any configuration.
- The Management module can be added to a chassis without losing any configuration the modules have been set to.
- The Management module will not be subjected to a “Mission Critical” condition. If the Management module is removed or fails, the iMcV-modules will not experience an interruption in service.

Configuration Control was created to solve the following issues:

- When non-Configuration Control iMcV-modules are placed in a managed chassis, the iMcV-module's DIP Switches are ignored and the iMcV-module is configured by the chassis' Management module. If the SNMP Management Module is removed or fails, then the iMcV-modules will revert back to the DIP Switch settings. When an iMcV-module configuration changes from the Management module's settings to DIP Switch settings, the traffic across the iMcV-module will be interrupted for a very short period of time.
- When introducing a Management module to a chassis full of working non-Configuration Control iMcV-modules, the iMcV-modules will stop using the DIP Switch settings and start using the Management module's settings. When an iMcV-module changes from DIP Switch settings to the Management module's settings, the traffic across the iMcV-modules will be interrupted for a very short period of time
- When removing an existing iMcV-module and replacing it with a different model iMcV-module, the configuration of the former iMcV-module remains.

In summary, there are two features that have been incorporated in Configuration Control:

- 1) Any module, including the Management Module, can be changed with the identical module under power, and the configuration from the removed module will be automatically copied to the new module.
- 2) iMcV-Module DIP Switch settings can be used to make initial configuration settings, overriding the Management module's setting.

Inserting a iMcV-module

- Without Configuration Control
 - The DIP Switches are ignored and the iMcV-module takes the configuration from the management module. This could be the default configuration or from a previously installed module.
- With Configuration Control
 - If the iMcV-module is different (model or DIP Switch settings) from the iMcV-module installed in the slot previously, then the DIP Switch settings are used for configuration. This configuration is then copied up to the management module.
 - If the iMcV-module is exactly the same (model and DIP Switch settings) to the iMcV-module previously installed, the iMcV-module will use the settings from the management module.

Inserting a Management module

- Without Configuration Control
 - iMcV-Modules in an unmanaged chassis use DIP Switch settings. When the management module is inserted the iMcV-modules use the configuration stored in the management module. This will more then likely change the configuration of the iMcV-modules; at the very least causing a short interruption in data flowing through the iMcV-modules.
- With Configuration Control
 - The iMcV-modules copy their configuration over to the Management Module. The iMcV-modules keep working with no configuration change and no interruption in data.

Removing a Management module / Failed management module

- Without Configuration Control
 - iMcV-Modules previously configured by the management module revert back to DIP Switch settings. This will more then likely change the configuration. At the very least causing an interruption in data flow.
- With Configuration Control
 - The iMcV-modules continue to use what ever configuration they were using. They have a local copy of the configuration

The SNMP Write Lock switch does not impact any of the iMcV-Modules with Configuration Control. If there is a mixture of iMcV-Modules with and without Configuration Control, the Write Lock Switch and a new Management Module must be taken into consideration.

If the command cleandb is applied to a Management Module, all the settings for the iMcV-modules will be removed, but the Configuration Control iMcV-modules will still be based on the

IMPORTANT NOTE:

1. iView₂ v.1.8.9 and SNMP firmware v.C4 **must** be installed to use IMC's Configuration Control feature.
2. iMcV-Modules that offer Configuration Control are identified by the label on the front faceplate and will reference a different part number.
3. Products with Configuration Control may function in the iMediaCenter chassis but the Configuration Control features will not be available.