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Application Note
AN0163
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Upgrade from SC200 to SC300

Last updated	4 June, 2021
Applicable products	SC300 System Controller, SC200 System Controller
Audience	Eaton DC Product Channel Partners and Integrators
Related documents	SC300 System Controller Operation Handbook SC300 Version 1.14 Product Release Note
For more information	Contact Product Manager, Simon Sloane (SimonSloane@eaton.com)

Contents

Summary

The SC300 controller is a replacement for the SC200 controller. It can be used as a drop-in replacement for the SC200 and should be used in all new designs.

The SC300 provides the following major enhancements over the SC200:

- New hardware platform for higher performance
- 100baseT Ethernet
- Faster start-up
- Enhanced logging
- Power and energy metering
- DHCP / Auto IP
- IP version 6
- Control ASC48-ES Solar Charger
- Control FC100 Fan Controller
- Smart Analogues function

This application note covers how to configure an SC300 as an upgrade to an SC200.

For full details of the changes from SC200 to SC300, please refer to *SC300 Version 1.14 Product Release Note*, available from Eaton.

To configure a new SC300

Any of the following methods can be used to configure an SC300 in a new system or as an upgrade to replace an SC300. Please review the notes below and choose the most appropriate method:

- **Load an existing SC300 configuration file using DCTools or web**
  Refer also to the SC300 manual.
- **Use default settings**
  See below.
- **MCF (Master Configuration File)**
  See below.
- **Load an existing SC200 configuration using web**
  See below.
- **Copy and edit SC200 configuration file using ICE**
  See application note AN0147

Load an existing SC300 configuration file using DCTools or web

Refer also to the SC300 manual.

If the appropriate configuration file is available, this is always the first choice.

Download the file using web *Tools* > *Restore Tool*, or DCTools *File* > *ICE Backup/Restore.*

MCF (Master Configuration File)

Eaton publishes a set of standard configuration files to use as a starting point for SC300 configuration.

These are available from Eaton DC telecoms distributors, or the Eaton DC Sales Web

1. Choose the nearest MCF to the required configuration.
2. If using DCTools, please ensure that the interface version (MIB) matches the SC300 interface version.

   Note: the web configuration download process includes an automatic interface version conversion.
3. Once the appropriate default / generic settings have been loaded, then use web or DCTools to change settings to suit the specific system.
4. Ensure the configured system is fully tested.
5. Save the final configuration for backup and future use.

Use default settings

Refer also to the SC300 manual.

The SC300 is supplied with a standard 48V positive earth configuration, suitable for a basic APS3 or similar system. Using the Generic System Type setting, this may be changed to any of:

- APS 24V
- EPS 48V with LVD
- EPS 48V (no LVD)

1. To set Generic System Type, go to web or DCTools *Identity* > *Software.*
2. Once the appropriate default / generic settings have been loaded, then use web or DCTools to change settings to suit the specific system.
3. Ensure the configured system is fully tested.

4. Save the final configuration for backup and future use.

Copy and edit SC200 configuration file using ICE

See application note AN0147 for detailed instructions.

The configuration editor tool (ICE) is provided to qualified technical staff. This may be used to convert an SC200 configuration into the SC300 format.

Please follow the procedure detailed in AN0147.

Load an existing SC200 configuration using web

The SC300 can convert a configuration loaded via the web from SC200 to SC300 format.

Please note some items are not converted and need to be manually updated. Refer to Appendix A for details.

1. Connect to the SC300 using web.
2. Go to *Tools* > *Restore Tool*.
3. Choose *System Snapshot* or *Configuration* as appropriate.
4. Browse to the SC200 configuration file.
5. Press *Next.*
6. Press *Proceed.*
7. Press F5 to restart the browser if necessary.
8. Check all items listed in Appendix A and correct them if necessary.
9. If any of the new SC300 features are to be used, configure them now.
   Refer to *SC300 Version 1.14 Product Release Note* for details of new features.
10. Ensure the configured system is fully tested.
11. Save the final configuration for backup and future use.

Appendix A Items that need to be checked / corrected after uploading an SC200 configuration by web

New Item	Description	Location (as seen in web view)	Recommended action
Web user password	All web user passwords	Communications > Protocols > HTTP > Web User Table	• If **any** web users have been configured, all the passwords need to be re-entered, including the default user. **This has to be done with DCTools**, as existing web passwords will not work. • Otherwise no change is required, and the default web user will apply: User = SC300 Password = Factory300
SNMPv3 Authentication Password	The authentication password if using SNMPv3.	Communications > Protocols > SNMP	• If SNMP V3 is used, this password has to be re-entered.
SNMPv3 Privacy Password	The privacy password if using SNMPv3.	Communications > Protocols > SNMP	• If SNMP V3 is used, this password has to be re-entered.
Data Log Intervals	The interval settings for all data logs.	Logs > Data Log > Log items table	• Check all the log interval values in the SC300 and copy across as appropriate from the SC200.
Data Log Off Normal Interval		Logs > Data Log	• Check and copy from SC200 if needed.
Data Log Off normal Offset Voltage		Logs > Data Log	• Check and copy from SC200 if needed.

New Item	Description	Location (as seen in web view)	Recommended action
IP addresses	SNTP primary and backup IP address SNMP trap receivers IP address Email notifications SMTP server address	<system/time/SNTP> <system/interfaces/SNMP/trap receivers> <system/interfaces/email notifications>	Re-enter addresses.