EST4 Network Services Configuration Worksheet

Worksheet instructions

This worksheet is an interactive PDF form. You can fill in the highlighted fields online and save the form to your hard drive or print the form and fill it in manually.

Caution: To maintain a permanent network connection, it is recommended you use a dedicated uninterruptible power supply (UPS) and a surge protection device deployed to ensure all network pathways remain active during primary power interruptions.

Contact information

For contact information, see www.edwardsfiresafety.com.

Time synchronization configuration

This section identifies questions to ask IT administrators. Gather the information before using the 4-CU to program the project's time synchronization source.

Ask the IT administrator:

1. Is it possible to connect to an Internet-based remote Network Time Protocol (NTP) server?

   ☐ Yes

   ☐ No: Information for step 4 below is not required.

Note: The information for step 2 below is entered in the 4-CU for the Node Configuration > Hardware Layer > device > Edit Properties tab > LRM Configuration group properties.

2. What is the Network Time Protocol for the node CPU?

   ☐ Server

   — or —

   ☐ Client: Information for step 3 below is not required

3. What time source will the NTP server use to synchronize node clocks across the network?

   Note: If the answer to step 2 above is Client, information for step 3 is not required.

   ☐ Master Panel Clock

   — or —

   ☐ Remote NTP Server

Note: The information for step 3 below is entered in the 4-CU for the Project > Project Data > Edit Properties tab > Remote NTP Server Address Type property.

4. What is the NTP server's IP address or full qualified domain name (FQDN)?

   Note: If the answer to step 1 above is No, information for step 4 is not required.

   ☐ IP address _____

   — or —

   ☐ Full Qualified Domain Name _____

5. This completes information gathering for configuring time synchronization.

4-FWALx node configuration

This section identifies questions to ask IT administrators. Gather the information before using the 4-CU to program the control unit for communication through 4-FWALx modules.

Ask the local IT administrator:

1. Where is the physical IP connection made to the network (switch, hub, etc.)?

   Location _____

2. Does the building network use an IPv4 or IPv6 network?

   ☐ IPv4

   ☐ IPv6

Notes: Information for steps 3 and 4 below is entered in the 4-CU on the Node Configuration > Hardware Layer > 4-FWALx > Edit Properties tab.

3. Should network connection addressing be obtained automatically (DHCP for IPv4; SLAAC for IPv6)?

   ☐ Yes: Check the eth0 IP Address Automatic and/or eth1 IP Address Automatic check box.

   ☐ No: Obtain the following static addresses for eth0 and/or eth1.

   Notes

   - The eth0 and eth1 network connections must be on different subnetworks and use the same IP version (IPv4 or IPv6). They must also be connected to different DHCP servers.
   - If you chose to use an automatic IP address (above), it *must* be configured on eth0.

   eth0 IP Address _____

   eth0 Subnet Mask _____

   eth0 Default Gateway _____

   eth1 IP Address _____

   eth1 Subnet Mask _____

   eth1 Default Gateway _____

4. Does the local network have a DNS server?

   ☐ No: No additional information is required.

   ☐ Yes: Obtain the following DNS addresses for eth0 and/or eth1.

   Note: The eth0 and eth1 network connections must be on different subnetworks.

   eth0 Preferred DNS server _____

   eth0 Alternate DNS server _____ (optional)

   eth1 Preferred DNS server _____

   eth1 Alternate DNS server _____ (optional)

5. This completes information gathering for configuring 4-FWALx modules.

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ECP Communication Service configuration

This section identifies questions to ask remote interface administrators (i.e., BMS other 3rd-party). Gather the information before using the 4-CU to program the control panel for remote communication.

Note: The information for all steps below is entered in the 4-CU on the Node Configuration > Communication Services > ECP Services > Edit Properties tab.

Ask the remote interface administrator:

1. Should secure communication (encryption) be used for communication between the control unit and remote interface?

   ☐ Yes: Check the Secure Communications check box (default setting).

   ☐ No: Clear the Secure Communications check box.

2. What is the ECP passphrase and license key number required for external applications to connect to the system?

   ECP Passphrase _____

   ECP License Key _____

3. This completes information gathering for configuring the ECP Communication Service.

IP Receiver Communication Service configuration

This section identifies questions to ask central monitoring station (CMS) administrators. Gather the information before using the 4-CU to program the control unit for CMS communication.

Note: The information for all steps below is entered in the 4-CU on the Node Configuration > Communication Services > IP Receiver Service > Edit Properties tab.

Ask the CMS administrator:

1. Does the account use a dialed number identification service (DNIS)?

   ☐ No: No entry is required.

   ☐ Yes: DNIS value _____

2. Does the account use subscriber identification (SIM)?

   ☐ No: No entry is required.

   ☐ Yes: SIM value _____

3. What is the Receiver 1 (primary) address type?

   Receiver 1 Address Type (IPv4, IPv6, or URL): _____

4. What is the Receiver 1 address or URL?

   Receiver 1 IPv4 or IPv6 Address _____

   — or —

   Receiver 1 URL _____

5. What is the Receiver 1 port number to be opened for communication?

   Receiver 1 Port _____

6. What is the Receiver 1 account code?

   Receiver 1 Account Code _____

7. Can the Receiver 1 connection be secure?

   ☐ No: No entry is required.

   ☐ Yes: Receiver 1 Encryption Key _____

8. Is an alternate receiver (Receiver 2) supported?

   ☐ No: No entry is required.

   ☐ Yes: Obtain Receiver 2 information.

   Receiver 2 Address Type (IPv4, IPv6, or URL): _____

   Receiver 2 IPv4 or IPv6 Address _____

   — or —

   Receiver 2 URL _____

   Receiver 2 Port _____

   Receiver 2 Account Code _____

   Receiver 2 Secure Communication ☐ Yes ☐ No

   If yes, Receiver 2 Encryption Key _____

9. What values does the CMS administrator want for the following?

   Heartbeat time (seconds) _____

   Supervision timeout (seconds) _____

   Maximum attempts _____

   Use the formulas below to calculate the maximum heartbeat and supervision time configurations to meet agency requirements.

   - For CAN/ULC-S559: [Supervision Time] + [Heartbeat Time] ≤ 180 s (3 min)
   - For UL 864 ninth edition: [Supervision Time] + [Heartbeat Time] ≤ 300 s (5 min)
   - For UL 864 tenth edition: [Supervision Time] + [Heartbeat Time] ≤ 3600 s (60 min)

10. This completes information gathering for configuring the IP Receiver Communication Service.

IP Receiver CMS Account configuration

This section identifies questions to ask central monitoring station (CMS) administrators. Gather the information before using the 4-CU to program the control unit for CMS communication.

Note: The information for all steps below is entered in the 4-CU on the IP Receiver Service Configuration > CMS Account Details > Edit Properties tab.

Ask the CMS administrator:

1. What is the CMS account number?

   CMS account number _____

2. This completes information gathering for the configuring the CMS Account.

Email Address List configuration

This section identifies questions to ask the authority responsible for deciding who will receive message notifications. Gather the information before using the 4-CU to program the control unit for email and SMS communication.

Note: The information for all steps below is entered in the 4-CU on the Project > Email Address List > Add Email Addresses tab.

Ask the local email messaging authority:

1. Is an email list of people who will receive message notifications available?

   ☐ Yes: Obtain the email list.

   ☐ No: Advise that the list must be provided.

2. Does the email list include wireless phone numbers for SMS text notifications?

   ☐ Yes: Obtain the carrier gateway address for the wireless provider (example, @txt.att.net).

   The 10-digit wireless number followed by the carrier gateway address is used for the Email Address property.

   Carrier gateway address _____

   Carrier gateway address _____

   Carrier gateway address _____

   Carrier gateway address _____

3. This completes information gathering for configuring the Email Address List.

Email Communication Service configuration

This section identifies questions and information to gather before using the 4-CU to program the control unit for email communication.

If the building has an SMTP server on the network, contact the local IT administrator for the required information.

If no local SMTP server or IT administrator is available, contact the Internet service provider (ISP) for the required information.

Ask the local IT administrator or ISP:

Note: The information for steps 1 through 8 below is entered in the 4-CU on the Node Configuration > Communication Services > Email Service > Edit Properties tab.

1. What is the primary SMTP server (Server 1) address type?

   Server 1 Address Type (IPv4, IPv6, or URL): _____

2. What is the Server 1 address or URL?

   Server 1 IPv4 or IPv6 Address _____

   — or —

   Server 1 URL _____

3. What is the Server 1 port number to be opened for communication?

   Server 1 Port number _____

4. Is an alternate SMTP server (Server 2) available?

   ☐ No: No entry is required.

   ☐ Yes: Obtain the Server 2 information.

   Server 2 IPv4 or IPv6 Address _____

   — or —

   Server 2 URL _____

   Server 2 Port number _____

5. What is the from email address that will show in email messages?

   Note: This must be a valid email address that an SMTP server can validate.

   From Email Address _____

6. What is the email account holder's user name and email account password?

   User Name _____

   User Password _____

7. Should secure communication (encryption) be used for communication between the control unit and server?

   ☐ Yes: Check the Secure Communication check box.

   ☐ No: Clear the Secure Communication check box.

8. Does the SMTP server require authentication?

   ☐ Yes: In the Trust Level property, choose Root Certificate.

   Note: Not all commercial email services are supported. Perform testing to determine if a specific root certificate is supported. If the root certificate fails, select No Authentication for the Trust Level property.

   ☐ No: In the Trust Level property, choose No Authentication.

Note: The information for steps 9 and 10 below is required for email provider settings.

9. Does the email provider use two-factor authentication?

   Note: When using email providers such as AOL, Gmail, iCloud, or Yahoo that offer two-factor authentication, it may be necessary to configure your email service to accept messages from the EST4.

   ☐ No: No action is required.

   ☐ Yes: Configure your email account to allow less secure apps or devices to send email. The property may be found under your email account, security settings.

10. Does the email provider support multiple TCP ports?

    ☐ No: No action is required.

    ☐ Yes: Check that you are using the proper TCP port for your email server. Use the TCP port that supports TLS v1.2 connections.

11. This completes information gathering for configuring the Email Communication Service.

Web Browser Communication Service configuration

This section identifies questions to ask local IT administrators. Gather the information before using the 4-CU to program the control unit for Web browser communication.

Note: The information for all steps below is entered in the 4-CU on the Project > Project Data > Edit Properties tab.

Ask the local IT administrator:

1. What is the web browser authentication password?

   Web Browser Password _____

2. This completes information gathering for configuring the Web Browser Communication Service.

IoT/ACS Communication Service configuration

This section identifies questions to ask local IT administrators. Gather the information before using the 4-CU to program the control unit for IoT/ACS communication.

Notes

- The information for step 2 below is entered in the 4-CU on the Node Configuration > Communication Services > IoT/ACS Service > Edit Properties tab.
- Ensure the 4-CU programmed system time is accurate for your time zone.
- IoT/ACS communication requires 4-CU V6.0.

Ask the local IT administrator:

1. Are building Ethernet ports 8883 and 443 open?

   ☐ No: Open ports 8883 and 443.

   Note: The building Ethernet port numbers 8883 and 443 *must* be open to allow communication.

   ☐ Yes: No action is required.

2. Does the ACS service need to be supervised?

   ☐ No: Clear the Supervision check box.

   ☐ Yes: No action is required.

3. This completes information gathering for configuring the IoT/ACS Communication Service.

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