Simcenter SCADAS RS

Quick Start Guide [V1.2206]

Ref. 75000614/20220624

Unboxing your REC

REC's wired adapter default configuration is automatic IP. A first point to point connection with a PC may be done, so that network settings can be further customized.
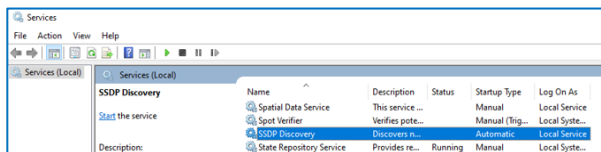
If REC is connected to a wired network, or to a PC with a DHCP server, ensure the server allows for a known, new device IP.

Power up your system

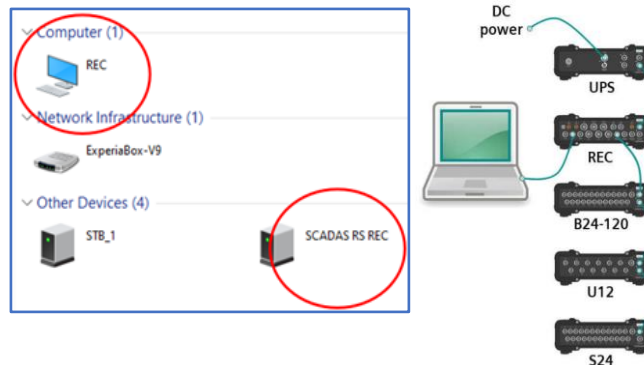1. Use UPS or AC/DC adapter for a single unit

Configure your PC

1. Set your network adapter to Windows default (automatic IP)
   a. Select Properties in Network and Sharing Center-Change adapter settings (right click)
   b. Select Properties in Internet Protocol Version 4 (TCP/IPv4)
   c. Select Obtain an IP address automatically and click OK
2. Enable SSDP Discovery service (if not enabled yet) for an automatic discovery
   a. Open Services App (type "services" in Windows bar)
   b. Select Properties in SSDP Discovery (right click)
   c. Set Automatic in Startup type, click Start and OK

Connect to your REC via cable [SCRSA-CABN02]

1. Connect the cable for a REC unit (1 GbE connector) to your PC
2. Using discovery: Go to Windows Explorer-Network (F5-refresh might be needed and wait up to 25 s). If no units are shown, you may refer to *Troubleshoot discovery*
   a. **Recorder App**: Double click on REC device in Other devices section
   b. **File system**: Double click on REC Computer
3. Or: using its IP
   a. **Recorder App**: Type the IP in web browser URL (prefer Chrome)
   b. **File system**: Type \\(IP) in Windows Explorer bar
   c. **SFTP**: Connect to the IP using WinSCP: winscp.net/eng/download.php

User: "ADMIN" (Recorder App), "USER" (Other services)
Default password: "SCADAS-RS"

Connect to your other units via cable [SCRSA-CABN01]

1. Connect the cable for a unit (daisy chain connector) to your PC
   a. Reboot UPS, if present and already switched on
2. Using discovery: Go to Windows Explorer-Network (F5-refresh might be needed and wait up to 25 s). If no units are shown, you may refer to *Troubleshoot discovery*
   a. **Configuration App**: Double click on REC device in Other devices section
3. Or: using its IP
   a. **Configuration App**: Type the IP in web browser URL (prefer Chrome)

Troubleshoot automatic discovery

If units are not discovered, or file system is not reachable via \\IP, check it after each one of next actions (in order):

1. Restart Workstation service in Services App
2. Change REC password to refresh file system server (see *Change user password for Wi-Fi access point and file system*)
3. Set network category to Private
   a. Set Location type to Private in Local Security Policy-Network List Manager Policies (double click on REC's network), press OK, and check if succeeded in Network and Sharing Center
   b. Or execute next command in Windows PowerShell: set-NetConnectionProfile -InterfaceAlias "*NameOfNetwork*" -NetworkCategory Private
4. Turn on network discovery for Guest or Public networks in Network and Sharing Center-Change advanced sharing settings (and remember to turn it back off when not using SCADAS RS)
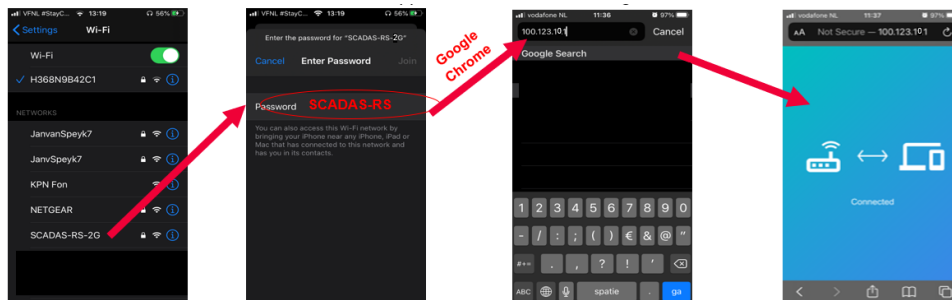5. Get Windows Firewall policies checked by your IT

Troubleshoot point to point and automatic IP

In the improbable case the automatic discovery fails, and the unit's IP is different from the one on the physical label (i.e., due to collision with your PC's IP):

1. Disconnect your unit from the PC, and reboot the unit
2. When booted, connect it to the PC and try again
3. "arp /a" Windows command might help to show the given IP to the unit

Connect to your REC's Wi-Fi access point

1. Connect Wi-Fi antenna(s) to REC
2. Enable Wi-Fi (if not enabled yet)
   a. Make a wired connection to Recorder App (see Connect to your REC using UTP cable)
   b. Set Topology-REC-Wi-Fi settings-Wi-Fi mode to "Access point 2.4 GHz"
   c. Click on Save button
3. Recommended for mobile devices:
   a. Switch off cellular data
   b. "Forget" current Wi-Fi network, if it has access to Internet
4. Select SCADAS-RS-2.4-nnnnnnnnnn Wi-Fi network
5. Default password: "SCADAS-RS"
6. Scan QR code or use **100.123.10.1** (see point 3 of *Connect to your REC using UTP cable*)

Connect your REC to your Wi-Fi network

1. Connect Wi-Fi antenna(s) to REC
2. Enable Wi-Fi (if not enabled yet)
   a. Make a wired connection to Recorder App (see Connect to your REC using UTP cable)
   b. Set Topology-REC-Wi-Fi settings-Wi-Fi mode to "Client"
3. Enter both existing Wi-Fi SSID (name) and password
4. Click on Save button
5. Find REC in your Wi-Fi network
   a. REC may be given an automatic IP, a fixed IP, or no IP at all, depending on existing network policies
   b. See point 3 of *Connect to your REC using UTP cable*, in case REC is given an IP by existing network

Update firmware of a single Unit

1. Make a connection to the On-board App of the Unit
   a. If Recorder App, login as "ADMIN", and preventively save the template
2. Go to Topology
3. Click on Firmware Update icon
4. Select update file
   a. Click on Select button
   b. Select the corresponding file
5. Select signature file (if requested)
   a. Click on Select button
   b. Select the corresponding file
6. Click on Update button and Confirm
7. Wait until process finishes, or until the Unit is booted (led is not blue or white anymore)
8. Switch SCADAS RS system off and on
9. Make a connection to the On-board App of the Unit
10. Check expected current build version and date at Topology-right pane, by clicking on the Unit
    a. Repeat process in case update failed

Change user password (Wi-Fi access point & file system)

1. Make a connection to the Recorder App
2. Set new password at Topology-REC-Password manager
   a. Length ≥ 8
   b. Special characters ≥ 1
   c. Uppercase characters ≥ 1
3. Click on Save button

Ground your stacks of units

1. Main stack: Bring external Earth ground (or vehicle chassis ground in mobile setups) to the units' stack chassis
   a. Use an accessible metallic point, like the back-plate screw (holes)
   b. Make an electrical contact to a grounded structure
      i. Mechanically
      ii. Or by using grounding cable accessory (SCRSA-CAB001)
2. Daisy chained stack (distance ≥10 m)
   a. Repeat same process for Main stack
3. Daisy chained stack (distance <10 m)
   a. No grounding needed (short daisy chain cable shield connects chassis between stacks)
4. Check proper grounding by measuring continuity between stack chassis and external ground with a multimeter while system is off, and only daisy chain cables are connected to the stack units

NOTES:
- SCADAS RS does not take ground from any power supply means
- Electrical contact between Units' chassis in a stack is provided by the short daisy chain cables, and not by the stack mechanism itself