

# Updox SMTP Edge Protocol Tool Instructions

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## I. Introduction

The Updox SMTP Edge Protocol Tool enables Updox EHR partners using Direct messaging APIs to demonstrate the SMTP edge protocol requirement in the 2015 ONC Certification (b1) Transitions of Care module. Edge protocol refers to the communication method between an EHR and its HISP.

The EHR sends and receives Direct messages the same as currently done (via the Updox APIs) and this tool converts the messages as needed for the test. In the (b1) certification test, the ONC Test Tool is the EHR's HISP (not Updox). The objective is to demonstrate that the EHR can communicate with its HISP via the SMTP edge protocol standard.

Setup is very easy. The EHR vendor simply directs their Updox API request calls to this edge protocol tool. Here is the workflow:

- Send
  - EHR sends a Direct message to the edge protocol tool via Updox API.
  - Edge protocol tool receives that message and sends to ONC Test Tool via SMTP.
  - ONC Test Tool receives the message and validates it was sent via SMTP.
- Receive
  - ONC Test Tool sends a message to the edge protocol tool.
  - Edge protocol tool receives the message and EHR retrieves the message via Updox API.
  - EHR receives the Direct message.

The following APIs are currently not supported. Contact us if you plan to use the Updox SMTP Edge Protocol tool and use any of these APIs when sending and retrieving Direct messages.

- Direct Actions
  - directVettedUserGet
  - patientDirectMessageSend
  - statusList
- Message Actions
  - messageCountForAccount
  - messageCountSince
  - messageEmptyTrash
  - messageForward
  - messageListSince1\_1
  - messageListSince1\_2
  - messageMark
  - messageMove
  - messageReply
  - messageRetrieve1\_1
  - userMessageListSince

### Important Notes:

- Sending and receiving is limited to the ONC Test Tool (cannot send a message to yourself using this tool).
- The ONC Test Tool does not send back MDNs for the (b1) module "Send" tests.
- There is no charge for this tool.
- This tool is for **testing purposes only**, not production use.
- This tool is optional, a partner may choose to add an edge protocol standard to its EHR product instead.

## II. Setup Steps

*Note: all certification testing needs to occur in the Updox **QA environment** (not Production).*

1. In your testing environment, direct your Updox API requests to this address followed by the API name <https://partner-edge.updoboxnet.com/api/io/>

For example: <https://partner-edge.updoboxnet.com/api/io/directSimpleSend>

Make a note of the original URL so you change the configuration back after you complete testing.

2. Create a new Updox test practice via API when pointing to [partner-edge.updoboxnet.com](https://partner-edge.updoboxnet.com).
3. Create a user in this practice with a Direct address.
4. Create a new account with the Updox SMTP Edge tool:
  - a. Go to <https://partner-edge.updoboxnet.com/ui/>
  - b. Complete the fields then click **Create Account**.

The screenshot shows the 'Account Management' form with the following fields and annotations:

- QA Account Information** (Section Header)
- Direct Address**: Annotated with 'Enter the Direct address for the user you created in step 3'.
- Application ID**: Annotated with 'Enter the Updox API credentials for the practice and user created in steps 2 & 3'.
- Application Password**: Annotated with 'Enter the Updox API credentials for the practice and user created in steps 2 & 3'.
- Account ID**: Annotated with 'Enter the Updox API credentials for the practice and user created in steps 2 & 3'.
- User ID**: Annotated with 'Enter the Updox API credentials for the practice and user created in steps 2 & 3'.
- HISP Endpoint** (Section Header)
- ttpds.sitenv.org:25**: Annotated with 'Enter [ttpds.sitenv.org:25](https://ttpds.sitenv.org:25)'.
- vendoraccount@ttpds.sitenv.org**: Annotated with 'Enter [vendoraccount@ttpds.sitenv.org](mailto:vendoraccount@ttpds.sitenv.org)'.
- .....**: Annotated with 'Enter [vendoraccount@ttpds.sitenv.org](https://vendoraccount@ttpds.sitenv.org)'.
- Create Account**: Annotated with 'Enter [vendortesting123](https://vendortesting123)'.
- Update HISP Endpoint**: Annotated with 'Enter [vendortesting123](https://vendortesting123)'.

Note: the information in the HISP Endpoint section is from the ONC Test Tool instructions.

### III. ONC Test Tool

1. Go to the ONC Test Tool website: <https://tppedge.sitenv.org/ttp/#/home>
2. Click **2015 Testing by Criteria**.
3. Click **170.315(b)(1)** tab.
4. Enter the profile information.
5. Select the criteria to be tested: (the XDR criteria are not applicable to this tool)
  - Criteria (i)(A) Send using Edge Protocol – SMTP
  - Criteria (i)(B) Receive using Edge Protocol – SMTP
  - Criteria (i)(C) XDM Processing (Received via Edge Protocol)
6. Follow the ONC Test Tool instructions for each of the test cases listed.

Secure | <https://tppedge.sitenv.org/ttp/#/certification/certb1>

## Edge Testing Tool - 2015 Certification Testing

ONC Certification

Home § 170.315(b)(1) § 170.315(h)(1) § 170.315(h)(2)

Select Criteria for § 170.315(b)(1) Please select

Default Profile

Vendor SMTP Hostname/IP  
partner-edge.updoxnet.com

Vendor SMTP Email Address  
youraddress@direct.updoxqa.com

Vendor SMTP Username Vendor Password  
client .....

TLS Required

+ New Profile Save Remove

Enter **partner-edge.updoxnet.com**

Enter the Direct address for the user you created in Step 3 of the Setup.

Username: **client**  
Password: **password**

## IV. Test: Send using Edge Protocol – SMTP

Note: You'll send a Direct message from the EHR/Updox account you created in the setup section to the Direct address specified in the ONC test cases.

The screenshot shows the Edge Testing Tool interface for 2015 Certification Testing. The browser address bar shows a secure connection to <https://tptedge.sitenv.org/ttp/#/certification/certb1>. The page title is "Edge Testing Tool - 2015 Certification Testing" and the sub-header is "ONC Certification". The navigation bar includes "Home", "§ 170.315(b)(1)", "§ 170.315(h)(1)", "§ 170.315(h)(2)", and "Login/Sign up".

The main content area is titled "Select Criteria for § 170.315(b)(1)" and features a dropdown menu set to "Criteria (i)(A) Send using Edge Protocol - SMTP".

On the left, a "Default Profile" configuration window is open, showing the following fields:

- Vendor SMTP Hostname/IP: partner-edge.updoboxnet.com
- Vendor SMTP Email Address: youraddress@direct.updoboxqa.com
- Vendor SMTP Username: [empty]
- Vendor SMTP Password: [empty]
- TLS Required:

At the bottom of the profile window are buttons for "+ New Profile", "Save", and "Remove".

On the right, two test configurations are displayed:

- SMTP Test 8, 14, 18 (Send)**: Verifies the ability of the sending system to send an email to ETT using the SMTP protocol with STARTTLS and PLAIN SASL Authentication (if enabled). The SUT will send an email to wellformed1@tptedge.sitenv.org. Hitting Run will cause ETT to search for an email sent to wellformed1@tptedge.sitenv.org from the email address entered in Profile window. Note that the C-CDA Document Type selected will not affect the test result. Includes a "C-CDA Document Type" dropdown set to "Select document..." and a "RUN" button.
- SMTP MT Test 46 (Generate Disposition Notification Options Header)**: Verifies the ability of the sending system to send messages with a correct Disposition Notification Options Header. The sending system will send a message to wellformed14@tpteds.sitenv.org with the required header. Hitting 'Run' will cause ETT to check for this header. Includes a "RUN" button.

Each test configuration has a "More Info." link and a "Logs" link.

# V. Test: Receive using Edge Protocol – SMTP

Note: You'll need to show that the message and attachment are received in the EHR.

**Edge Testing Tool - 2015 Certification Testing**

Home
§ 170.315(b)(1)
§ 170.315(h)(1)
§ 170.315(h)(2)
Login/Sign up

Select Criteria for § 170.315(b)(1) Criteria (i)(B) Receive using Edge Protocol - SMTP

<div style="border: 1px solid #ccc; padding: 5px;"> <p>Default Profile <span style="float: right;">ⓘ</span></p> <p>Vendor SMTP Hostname/IP <span style="float: right;">ⓘ</span> partner-edge.updoxnet.com</p> <p>Vendor SMTP Email Address <span style="float: right;">ⓘ</span> youraddress@direct.updoxqa.com</p> <p>Vendor SMTP Username <span style="float: right;">ⓘ</span>    Vendor SMTP Password <span style="float: right;">ⓘ</span></p> <p>TLS Required <input checked="" type="checkbox"/> <span style="float: right;">ⓘ</span></p> <p style="text-align: right;"> <span style="background-color: #0056b3; color: white; padding: 2px 5px; border-radius: 3px;">+ New Profile</span> <span style="background-color: #ffc107; padding: 2px 5px; border-radius: 3px; margin-left: 10px;">Save</span> <span style="background-color: #dc3545; color: white; padding: 2px 5px; border-radius: 3px; margin-left: 10px;">Remove</span> </p> </div>	<div style="border: 1px solid #ccc; padding: 5px;"> <p><b>SMTP Test 9, 16, 20 (Receive)</b></p> <p>Verifies the ability of the receiving system to accept a STARTTLS connection with PLAIN SASL authentication(if enabled). Hitting 'Run' will cause ETT to send an email. Verify the receipt of email with subject 'STARTTLS &amp; PLAIN SASL AUTHENTICATION'.</p> <p>C-CDA Document Type <span style="float: right;">ⓘ</span> <input type="text" value="Select document..."/></p> </div>	<a href="#">More Info.</a>  <a href="#">Logs</a>	RUN		
<div style="border: 1px solid #ccc; padding: 5px;"> <p><b>SMTP Test 25(a) (Receive Text and CCDA)</b></p> <p>Verifies the ability of SUT to receive text and CCDA attachments</p> </div>				<a href="#">More Info.</a>  <a href="#">Logs</a>	RUN
<div style="border: 1px solid #ccc; padding: 5px;"> <p><b>SMTP Test 25(b) (Receive PDF and CCDA)</b></p> <p>Verifies the ability of SUT to receive PDF and CCDA attachments</p> </div>				<a href="#">More Info.</a>  <a href="#">Logs</a>	RUN
<div style="border: 1px solid #ccc; padding: 5px;"> <p><b>SMTP Test 25(c) (Receive Text and XDM)</b></p> <p>Verifies the ability of SUT to receive text and XDM attachments</p> </div>				<a href="#">More Info.</a>  <a href="#">Logs</a>	RUN
<div style="border: 1px solid #ccc; padding: 5px;"> <p><b>SMTP Test 25(d) (Receive CCDA and Text)</b></p> <p>Verifies the ability of SUT to receive CCDA and text attachments</p> </div>				<a href="#">More Info.</a>  <a href="#">Logs</a>	RUN
<div style="border: 1px solid #ccc; padding: 5px;"> <p><b>SMTP Test 25(e) (Receive CCDA and Pdf)</b></p> <p>Verifies the ability of SUT to receive CCDA and PDF attachments</p> </div>				<a href="#">More Info.</a>  <a href="#">Logs</a>	RUN
<div style="border: 1px solid #ccc; padding: 5px;"> <p><b>SMTP Test 25(f) (Receive XDM and Text)</b></p> <p>Verifies the ability of SUT to receive XDM and text attachments</p> </div>				<a href="#">More Info.</a>  <a href="#">Logs</a>	RUN
<div style="border: 1px solid #ccc; padding: 5px;"> <p><b>SMTP Test 26(a) (Receive bad CCDA)</b></p> <p>Verifies the ability of SUT to receive a CCDA document that includes a broken reference to a style-sheet</p> </div>				<a href="#">More Info.</a>  <a href="#">Logs</a>	RUN
<div style="border: 1px solid #ccc; padding: 5px;"> <p><b>SMTP Test 26(b) (Receive bad CCDA)</b></p> <p>Verifies the ability of SUT to receive a CCDA document with good reference to an invalid style-sheet</p> </div>				<a href="#">More Info.</a>  <a href="#">Logs</a>	RUN
<div style="border: 1px solid #ccc; padding: 5px;"> <p><b>SMTP Test 27 (Receive XDM with bad XHTML)</b></p> <p>Verifies the ability of SUT to receive an XDM package containing a bad XHTML file</p> </div>				<a href="#">More Info.</a>  <a href="#">Logs</a>	RUN
<div style="border: 1px solid #ccc; padding: 5px;"> <p><b>SMTP Test 28 (Receive XDM with MIME type 'application/octet-stream')</b></p> <p>Verifies the ability of SUT to receive an XDM package with MIME-type 'application/octet-stream' at the SMTP layer</p> </div>				<a href="#">More Info.</a>  <a href="#">Logs</a>	RUN
<div style="border: 1px solid #ccc; padding: 5px;"> <p><b>SMTP Test 29 (Receive XDM with MIME type 'application/xml')</b></p> <p>Verifies the ability of Vendor to receive an XDM package with MIME-type 'application/xml' at the XDM layer (in METADATA.XML)</p> </div>				<a href="#">More Info.</a>  <a href="#">Logs</a>	RUN

# VI. Test: XDM Processing

Select Criteria for § 170.315(b)(1)

Criteria (i)(C) XDM Processing(Received via Edge Protocol)

<p>Default Profile</p> <p>Vendor SMTP Hostname/IP partner-edge.updoxnet.com</p> <p>Vendor SMTP Email Address youraddress@direct.updoxqa.com</p> <p>Vendor SMTP Username    Vendor SMTP Password</p> <p>TLS Required <input checked="" type="checkbox"/></p> <p>+ New Profile    Save    Remove</p>	<p><b>SMTP Test 9, 16, 20 (Receive)</b> Verifies the ability of the receiving system to accept a STARTTLS connection with PLAIN SASL authentication(if enabled). Hitting 'Run' will cause ETT to send an email. Verify the receipt of email with subject 'STARTTLS &amp; PLAIN SASL AUTHENTICATION'.</p> <p>C-CDA Document Type    Select document...</p>	<p>More Info. Logs</p> <p><b>RUN</b></p>
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# VII. Wrap Up

When finished with the testing, direct the API requests from your test EHR back to the Updox QA environment (e.g. https://updoxqa.com/api/io/directSimpleSend).