

Remote Assistance Security Whitepaper



Version: 1.0



Objective and Scope

Remote assistance is an optional, user oriented interface developed by Fuji Xerox. The objective of this document is to introduce and explain the Remote Assistance function and specify the customer's environment configuration, with focus on network specifications and data transmission settings required for this service to work.

This document describes the incremental Remote assistance activity on a Remote assistance capable device. For the device information, refer to relevant device security whitepaper available on request.

DEFINITIONS:

Remote Assistance: "Remote Assistance" function allows shared control of a MFD between the customer and Fuji Xerox Operator. This feature can be accessed by pressing the remote assistance button on the MFD control panel.

Device: The Multi-Function Device (MFD) or Printers provided by Fuji Xerox.

SSL: SSL (Secure Sockets Layer) is a standard security protocol for establishing encrypted links between a web server and a browser in an online communication. The usage of SSL technology ensures that all data transmitted between the web server and browser remains encrypted.

Cloud Service: Cloud services means services made available to users on demand via the Internet from a cloud computing provider's servers as opposed to being provided from a company's own on-premises servers.

1. REMOTE ASSISTANCE MODE

This chapter describes the Remote assistance mode options. An Access Code presented to the customer, is required by the Fuji Xerox Operator to remotely control the MFD Control Panel.

The following are the three remote assistance mode options available:

1. USER MODE

An operator will guide the user through tasks with the guiding pointer or Pen function, while checking the MFD control panel.

2. OPERATOR MODE

The MFD control panel is completely controlled by Fuji Xerox Operator. The Customer can still see the operator's actions on the control panel.

When switching from User mode to Operator mode, the Fuji Xerox Operator should request and obtain the customer's consent which can be agreed upon on the control panel.

NOTE: The customer must enter The system administrator ID.

3. ENGINEER MODE

An operator can enter an Engineer mode to configure/change various settings.

Customer's control panel is not displayed while in sleep mode.

- ❖ If Customer wishes to END Remote assistance operation, Customer can select the EXIT button or to hold “#” button for 5 seconds or longer to disconnect Remote Assistance.

2. REMOTE ASSISTANCE INTERACTIONS WITH THE DEVICE

This chapter describes the interactions with the device, related to Remote Assistance functionality. The device functionality refers to the relevant device security whitepaper which is available upon request.

2.1 REMOTE ASSISTANCE COMMUNICATION FUNCTION.

The remote assistance communication function is incorporated as custom content rather than firmware; it may be as it is in the sense that is built-in at the time of shipment on the controller

board in a Remote assistance capable device. Communication with Remote assistance is performed via the LAN Port on the controller board.

2.2 MEMORY AND IMAGE DATA HANDLING

Non-volatile memory is used to store the address book and temporary and image data used during device functions. These functions can include copy, fax, print and scan. Non-volatile memory is also used to store Remote assistance data but in a separate logical area.

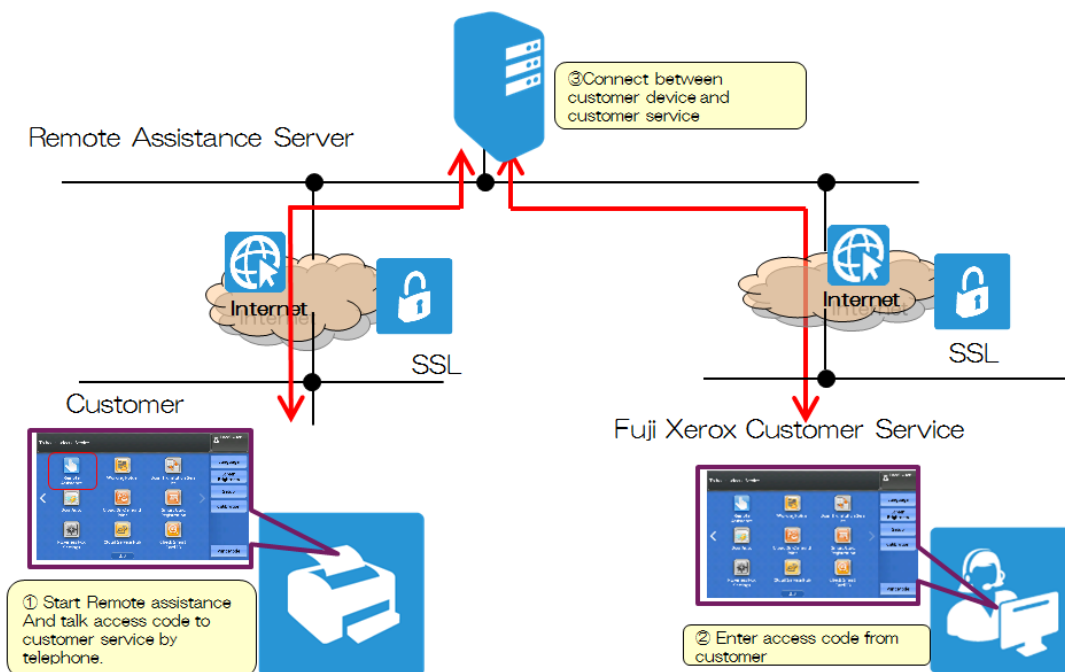
3. NETWORK COMMUNICATIONS

3.1 COMMUNICATION METHOD

Remote assistance enabled device communicates with the Remote assistance server on cloud using an encrypted SSL link to protect the data. The standard port 443 is used in SSL communication and the port used cannot be altered.

If the SSL standard port is blocked by the customer's environment, communication between the customer network and the Remote assistance server is not possible.

Communication using a proxy solution is supported with "basic authentication" method. Diagram below shows the Remote assistance communication.



3.2 CONTENT AND SIZE OF OUTBOUND DATA.

The volume and the frequency of data transmitted to the Remote assistance are described in the table below. The Remote assistance cannot send other data except for below.

Activity	Data	From	To	Size	Note
connecting	Device serial date	Device	Remote assistance server	Under 1 Kb	
Accessible check	Accessible check data	Device	Remote assistance server	Under 1 Kb	Every 5 secs
All 3 modes	Control panel communication data	Device	Remote assistance server	Max; 380 kbps Min; 20 Kbps Ave; 150Kbps	

3.3 CONTENT AND SIZE OF INBOUND DATA.

When a device initiates a scheduled or an on-demand communication, data is requested from, Help server. This data is described below:

Activity	Data	From	To	Size	Note
Prepare to connect remote assistance	access code	Remote assistance server	Device	1 Kb	
Accessible check	Accessible check data	Device	Remote assistance server	Under 1 Kb	Every 5 secs
User mode	Pointer and pen guide data	Remote assistance server	Device	Max; 250 kbps Ave; 100Kbps	On demand
Operator mode	UI Operation data	Remote assistance server	Device	Max; 250 kbps Ave; 100Kbps	On demand

4.0 REMOTE ASSISTANCE SERVER

This Chapter describes the Remote Assistance Server management.

4.1 INFORMATION SECURITY MANAGEMENT IN THE REMOTE ASSISTANCE SERVER

Fuji Xerox is committed to information security. For details, please refer to the following URL shown below on information security.

<http://www.fujixerox.co.jp/eng/company/public/security.html#>

4.2 ACQUISITION OF PERSONAL INFORMATION

All communication between the customer and operator and its related information (including but not limited to FX Machine's serial number and date/time of access) while using Remote Assistance may be recorded.

When Remote Assistance Information includes customer's personal information, Fuji Xerox shall comply with the obligations of the applicable privacy protection law and privacy of Fuji Xerox. (http://www.fujixerox.co.jp/eng/common/privacy_policy/) in relation to collection, use or management of personal information provided by the Customer. This privacy policy will be updated frequently.

4.3 HOW WE USE INFORMATION

We use the information sent via the Device to improve our service to you. The information may be shared among our employees, agents or other related Fuji Xerox entities and/or business partners acting on our behalf. We will not share this information with non-Fuji Xerox companies, except to the extent necessary to meet your request for services, and with the understanding that it will not be used for any purposes other than to provide services to you.

5. OUR COMMITMENT TO DATA SECURITY

Fuji Xerox strives to ensure that our IT systems are secure and that they meet industrial standards. To prevent unauthorized access, maintain data security, and ensure the proper use of information, we have put in place appropriate physical, electronic, and managerial procedures to safeguard and secure the information. We will continue to assess new technology to evaluate its ability to provide additional protection of your information.