



LongReach

Document Library

LongReach

Server Installation
Instructions

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Welcome to LongReach server installation instructions

LongReach is a native iOS application that provides file and folder management and file transfer between a server and mobile devices such as the iPhone and iPad. The application manages documents, presentations, spreadsheets, photographs, voice recordings, video, and text files. Files can be created on the mobile device or on the server and transferred securely between the two.

All files are encrypted for transmission between the server and mobile devices. Users must have an active user profile to use the server components, and on IBM i servers, user permissions control the user's ability to create folders on the server.

To use the LongReach app, download the app from an Apple App Store. No configuration is necessary to use LongReach as a stand-alone app on the mobile device. To use the LongReach app with its server components, switch LongReach communications on and configure the LongReach communications settings on the mobile device.

The LongReach app can operate on a mobile device without its server components.

The LongReach server components only operate with the LongReach app.

This document contains instructions for installing the server components of LongReach.

Before you start

Read this section before attempting to install LongReach.

Read the section describing the installation process on one page, to understand the steps in the server installation process ("Installation process on one page", on page 5).

Read the installation prerequisites, to understand the requirements for operating LongReach on a server ("Installation prerequisites", on page 4).

To use both the LongReach app and the LongReach server:

1. Download the LongReach app and install on an iPad or iPhone.
2. Download the LongReach server software and install it on an IBM i server.

What you need to do before installing LongReach

On the server

Before you can install the LongReach server components you need to download the software.

1. To download the LongReach server software, go to www.lansa.com/longreach and follow the download instructions.
2. When you have downloaded the file, transfer it to the server.
3. Run the LongReach installation.

You do not need a license to use the LongReach server components during the trial period.

To use the LongReach server components beyond the trial period you must obtain a license.

On mobile devices

The installation procedure for each person who wants to use the LongReach server from the LongReach app is as follows.

- | |
|--|
| 1. Download the LongReach app from the Apple App Store and install it on the mobile device. |
| 2. Configure the app to communicate with the LongReach server (see the Communications settings). |

No license is necessary for the LongReach app.

Installation prerequisites

The installation instructions assume that you are knowledgeable about software installation and administration tasks on IBM i (AS/400, iSeries, System i) servers.

Before starting a LongReach installation you need the items listed in Table 1 (page 4).

Table 1: Installation Prerequisites

Prerequisite Items
A LongReach download file (this is a zipped save file).
IBM i operating system V5R4 and later, plus all the latest PTFs.
IBM Java JDK is installed and at version 1.4 or above.
<p>Port number(s) you wish to use for LongReach.</p> <p>The default port numbers are:</p> <ul style="list-style-type: none"> 6560 Java Service Manager (JSM) Server. 6561 Console Server. 6563 LongReach HTTP connections. 6564 LongReach HTTPS connections. <p>You can use the default ports or choose different ports for your installation.</p> <p>Your network must allow communications via the default ports or your nominated ports for LongReach to operate successfully.</p>

LongReach installs the IBM Toolkit for Java (the Java JDK is a prerequisite for the toolkit).

Install the prerequisite software from IBM before installing LongReach.

Important reminder	LongReach server components will not operate successfully without the prerequisite software.
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Installation process on one page

Step 1: transfer downloaded save file to IBM i server

1. Download the LongReach zipped save file to your personal computer.
2. Unzip the file into a directory using your preferred unzip tool.
3. Ensure the IBM i FTP server is running.
4. Start a command prompt window (on the personal computer).
5. Change to the directory containing the unzipped save file.
6. Start FTP to your IBM i server and transfer to a save file named QGPL/LONGREACH.SAVF To learn more about FTP, refer to the FTP explanation in the transfer downloaded save file step (page 6).

Step 2: install LongReach

1. Sign on to the IBM i server as QSECOFR or a user with QSECOFR group authority.
2. RSTOBJ OBJ(*ALL) SAVLIB(QTEMP) DEV(*SAVF) SAVF(QGPL/LONGREACH)
3. Install LongReach on non-DBCS systems: LOADREACH REPLACERLS(*ONLY) LNG(2924) Install LongReach on DBCS systems: LOADREACH REPLACERLS(*ONLY) LNG(2984)

Step 3: verify the installation

Check that the licensed program 1REACH1 has status *INSTALLED.

Verify that the LongReach sub-system and the LongReach jobs are active.

Refer to the detailed explanation of step 3 for more information.

Step 4: change default configuration settings (optional)

This step is required only when you need to change default settings.

Sign on as LONGADM with password LONGADM.

At the first sign on LongReach will request a password change.

Refer to the detailed explanation of step 4 for information about changing settings.

Step 5: clean up after the installation

After the install of LongReach, delete the file QGPL/LONGREACH.

Also clean up your personal computer by deleting the zipped file and the unzipped save file you downloaded.

Installation instructions

This section contains explanations of what to do in each step of a LongReach installation process. Table 2 (page 6) presents a summary of the steps in the installation process and explains what happens at each step.

Table 2: Installation Process Summary

Steps	What Happens in each Step
1.	In step 1 you unzip the download file and transfer the decompressed file to your IBM i server.
2.	Step 2 installs the server components of LongReach.
3.	Verify that the installation was successful.
4.	Change default configuration settings. This is an optional step.
5.	Clean up temporary files after the installation is finished.

Step 1: transfer downloaded save file to IBM i server

1.	Download the LongReach zipped save file to your PC. You will need approximately 45–50 MB of disk space to download and unzip.
2.	Unzip the file into a directory on your personal computer using your preferred unzip tool. For example: <code>UNZIP [file-name].ZIP</code> Where [file-name] is the name of the zip file. The unzipped file may be up to 3 times larger than the zipped version so please ensure you have enough space on your personal computer hard drive.
3.	To transfer the save file to IBM i server via FTP, ensure the IBM i FTP server is running. Run the command <code>STRTCPSVR *FTP</code> , to start the FTP server (you must have authority to use this command).
4.	Start a command prompt window on the personal computer.
5.	Change to the directory containing the unzipped save file.

6. Start FTP to your IBM i server and transfer the file by issuing the following commands, replacing the [host-system], [user-profile], and [password] with appropriate values for your environment.

```
FTP [host-system]
    [user-profile]
    [password]
    quote site namefmt 1
    cd /QSYS.LIB/QGPL.LIB
    bin
    prompt
    put longreach.savf
    quit
```

Step 2: install LongReach

1. Sign on to the IBM i server as QSECOFR or a user with QSECOFR group authority.

2. Run the command:
`RSTOBJ OBJ(*ALL) SAVLIB(QTEMP) DEV(*SAVF) SAVF(QGPL/LONGREACH)`

3. Install LongReach on non-DBCS or DBCS systems.

Install LongReach on non-DBCS systems:

```
LOADREACH REPLACERLS(*ONLY) LNG(2924)
```

LIBRARY is the name of the LongReach product library and must not exist.
The default name is LONGREACH.

DIRECTORY is the name of LongReach product IFS path name and must not exist.
The default name is /longreach.

LNG is the primary language code and defaults to 2924.

Install LongReach on DBCS systems:

```
LOADREACH REPLACERLS(*ONLY) LNG(2984)
```

LIBRARY is the name of the LongReach product library and must not exist.
The default name is LONGREACH.

DIRECTORY is the name of LongReach product IFS path name and must not exist.
The default name is /longreach.

LNG is the primary language code defaults to 2984. If you wish to change the default language code see Table 3 (page 8).

Refer to Table 3 (page 8) and change the default language code where appropriate:

Table 3: Language Codes

Language Code	Language
2924	English Uppercase and Lowercase Use this value when installing on a Single-Byte Character Set (SBCS) system for which no translated version of LongReach is provided.
2938	English Uppercase Support for Double-Byte Character Set (DBCS) Use this value when installing on a DBCS system for which no translated version of LongReach is provided and the system does not support lower-case English characters (for example Katakana-Kanji).
2984	English Uppercase and Lowercase Support for Double-Byte Character Set (DBCS) Use this value when installing on a DBCS system for which no translated version of LongReach is provided.

LANGLIBE is the name of the secondary language library into which the secondary language objects are restored. The default is to *SAME but you can use a different library name.

Step 3: verify the installation

Check LongReach software

- From a command line, type GO LICPGM and choose option 10.
This will display a list of installed licensed programs.
- Page up or down to locate the Licensed Program name 1REACH1 and check the install status.

The licensed program display below is an example of a successful install:

Licensed Program	Installed Status	Description
1REACH1	*INSTALLED	LongReach Base
1REACH1	*INSTALLED	LongReach Server

If the installation failed the licensed program display will show:

Licensed Program	Installed Status	Description
1REACH1	*ERROR	

Check the job log to determine the cause of the failure.

Check LongReach sub-system and jobs

From a command line, type WRKACTJOB SBS(LONGREACH)

If the sub-system is active the following jobs will be also be active:

Subsystem/Job	User	Type	CPU %	Function	Status
LONGREACH	QSYS	SBS	.0		DEQW
JSMJOB01	LONGREACH	BCI	.0	JVM-com.lansa.	TIMW
STRLONG	LONGREACH	ASJ	.0	CMD-RUNJSM	TIMW

If the jobs JSMJOB01 and/or STRLONG are not running a port number conflict exists for the Java Services Manager and/or the Console Server.

Use the Work with Java Services Manager option from the administrator menu to browse the log files and trace files to determine what caused the problems.

Review your choice of port numbers and determine whether other applications are using the same port numbers. If necessary, change the port numbers, then end the LongReach sub-system and start the Java Service Manager again (see step 4 for instructions).

Step 4: change default configuration settings

To change configuration settings:

Sign on as LONGADM with a password. The default password is LONGADM and at the first sign on you will be asked to change the default password.

The Java Service Manager (JSM) menu will start after sign on and it contains options for changing configuration settings. The menu options are:

1. Start Java Service Manager
2. Clear Java Service Manager
3. Optimize Java Service Manager
4. Edit Manager Properties
5. Edit Service Properties
6. Change Default JSM Instance
7. Work with Java Service Manager

Table 4 (page 9) provides an explanation of the menu options.

Table 4: Changing Configuration Settings

JSM Menu Options	Explanation
Start Java Service Manager	Starts the LongReach sub-system and associated jobs.
Clear Java Service Manager	The clear option removes trace files. Run a clear periodically to remove log and trace files generated the application.
Optimize Java Service Manager	Do not use this option.

JSM Menu Options	Explanation
Edit Manager Properties	This option edits the manager.properties configuration file and is where you change port numbers for the JSM server and Console server.
Edit Service Properties	Do not use this option.
Change Default JSM Instance	Do not use this option.
Work with Java Service Manager	This option displays objects related to LongReach and the Java Service Manager.

To change the default configuration settings for LongReach services, edit the httpd.xml configuration file. The administrator guide explains how to configure these services.

Step 5: clean up after the installation

If you used QTEMP library during the installation the only file to delete is the save file loaded by default into QGPL the file is QGPL/LONGREACH).

The following objects are in QTEMP:

Files	LONGREACH LONG_*  LONDSP01 LONGLICAGR
Command	LOADREACH
Program	LOADREACHP

 Includes all files starting with LONG_.

Also, clean up your personal computer by deleting the zipped file and the unzipped save file you downloaded.

Request a server license

You can request a LongReach server license from the LongReach web site.

To obtain a server license you need to provide the following details:

- System model number
- Processor feature
- Serial number
- Processor group
- IBM i version

To display the above information run the command DSPSYSDTL from a command line.

The command will display the following information:

System model number	E4B
The processor feature	8350
The serial number	78B03DZ
Processor group	P05
IBM i version	V7R1M0

The serial number in this example is fictitious.

Appendices

How to upgrade to a new version of LongReach server

The installation instructions for upgrading to a new version of LongReach server are the same as installing LongReach server.

Make a backup of the LongReach data and configuration file (httpd.xml) before installing an upgrade to a new version.

If you have changed the default LongReach configuration file (httpd.xml), compare the new version of the httpd-template.xml file to your copy of httpd.xml and make the appropriate changes.

Changing the default LongReach configuration

To change the default LongReach configuration refer to the LongReach Administrator Guide. It explains how to configure LongReach services.

Advice for choosing port numbers

Choose ports numbers that are not used by other applications in your environment.

Make sure the port number is not blocked by web browser default configurations, fire walls or router settings.

At http://en.wikipedia.org/wiki/List_of_TCP_and_UDP_port_numbers you can see a complete list of registered TCP/IP ports. Your best choice is any port number greater than 1023 and not listed in the Wikipedia list (e.g. 8085) or listed in the Wikipedia list with Status = Unofficial (e.g.: 8081).

Also check the ports listed in <http://www.iana.org/assignments/port-numbers> to make sure you have not chosen a well known or registered port number.

Using HTTPS with LongReach

To use HTTPS with LongReach requires additional installation work.

- | |
|--|
| 1. Generate the appropriate public key certificates. |
| 2. Change the HTTPS directives in the LongReach configuration. |

The Longreach Administrator Guide contains more information about configuring HTTPS.

LongReach app on a mobile device

The LongReach app must be installed on a mobile device and the communications settings configured to transfer files to and/or from a server.

Installation on a mobile device

Download the app from the Apple App Store. No configuration is necessary to use the LongReach app as a stand-alone app on the mobile device.

To use LongReach with its server components, install the app, then configure the communications settings on the mobile device. The server components must be installed and operating for the mobile device to connect successfully.

Communicating with a server

Servers list

Figure 1 (page 13) presents settings to switch on or off communications with servers and shows a list of servers configured for communications with the mobile device.

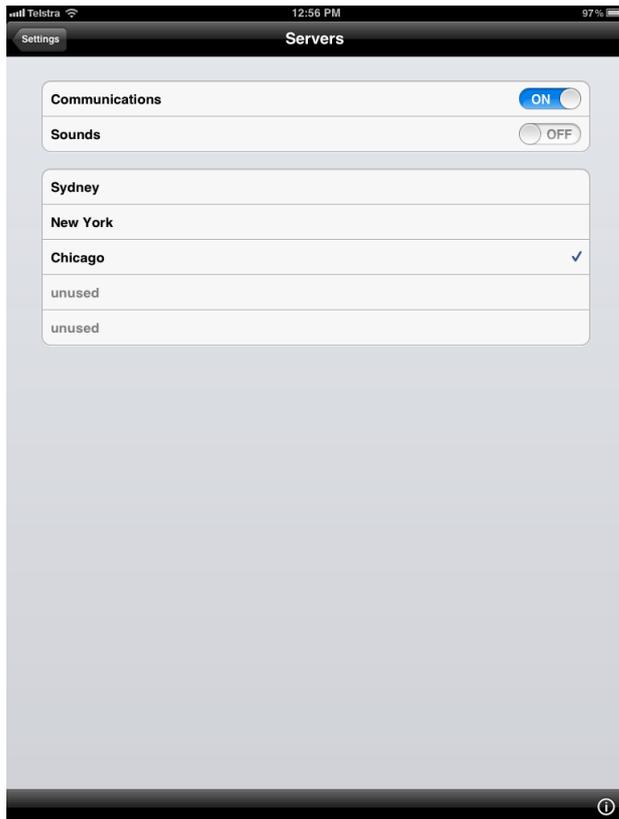


Figure 1: Communications On/Off and Server List

This page consists of three items, a switch to turn communications on or off, a switch to turn communications sounds on or off, and a list of servers. Table 5 (page13) explains how to change the switches.

Table 5: Communications On/Off and Sounds Explanation

Communications		Allows the mobile device to communicate with a server.
		Prevents the mobile device from communicating with a server.

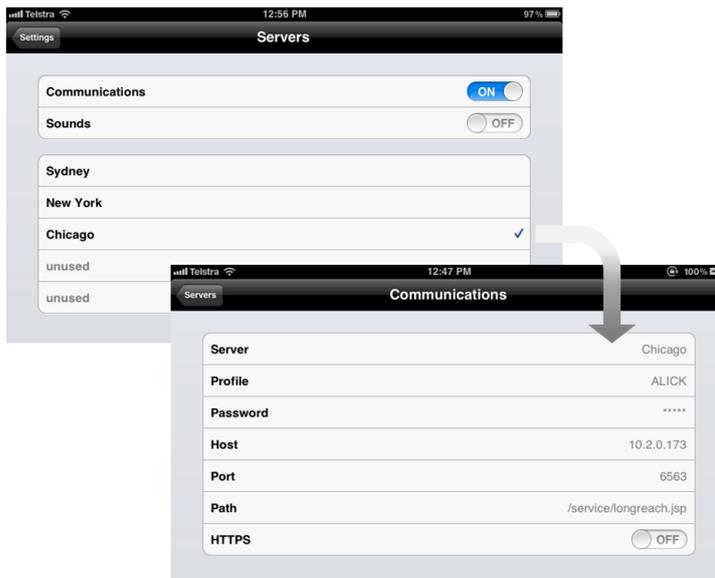
Sounds	<input checked="" type="checkbox"/> ON	LongReach plays sounds for communications events.
	<input type="checkbox"/> OFF	No sounds. LongReach does not play sounds for communications events.

Table 6 (page 14) describes how to choose a server and edit the communications settings for the selected server.

Table 6: Communications Settings Server List

New server	To configure a new server tap an unused server name and LongReach will display the communications settings for the selected server.
Change a server	To change server communications settings, tap the name of the server you wish to change. LongReach will display the communications settings for the selected server.

The LongReach app provides communications settings for up to five servers.



Choosing a server from the server list displays the communications settings for the selected server.

Server communications settings

Figure 2 (page 15) shows the communications settings for a server. This example shows the settings for a server named Chicago.



Figure 2: Server Communications Settings

Each server in the server list has its own communications settings.

Table 7 (page 15) describes the items in the communications settings.

Table 7: Communications Settings Explanation

Server	Server is a name to identify the server. Choose a name that is meaningful to you. The name is used only to identify the server on the mobile device.
Profile	A user name (or profile) known to the server.
Password	Password to access the server. If the password is blank, LongReach will prompt for a password.
Host	DNS name or TCP/IP address of the server.
Port	TCP/IP port number to use when communicating with the server.
Path	URL for the LongReach service provided by the server.

HTTPS	<input checked="" type="checkbox"/> ON
	Use HTTPS protocol.
	<input type="checkbox"/> OFF
	Use HTTP protocol.

Administrators are responsible for providing LongReach app users with values for profile, password, host, port, path and HTTP/HTTPS settings.

What to do if the installation fails

1. Check the job log to determine the cause of the failure.
Browse the LongReach output queue, the log and trace files.
2. Remedy the cause of the failure.
3. Remove the LongReach licensed program: DLTLICPGM 1REACH1
4. Re-check the prerequisite requirements.
5. Run the installation again.

Port numbers are the most common cause of problems. The default port numbers used by LongReach may already be in use by another application or blocked by firewalls and routers.

For more information about LongReach

Documentation for LongReach is available as, user guides on mobile devices, an administrator guide for managing the server components of LongReach, and this document that contains installation instructions.

The documentation on mobile devices provides context sensitive information and instructions about the features of the LongReach app.

The Administrator Guide includes design guidelines for setting up, configuring and managing the server components of LongReach.