

StarTool® IOO 3.1 Patch 7 Readme

January 2024

This Readme file contains information for StarTool IOO patch release 3.1 Patch 7.

See "[Installation Considerations](#)" on [page 5](#) for instructions on downloading and installing the StarTool IOO 3.1 Patch 7 patch release.



NOTE In StarTool IOO release 3.1.4.02, the default bufferspace for non-VSAM buffers was changed from 160KB (with reblocking) and 256KB (without reblocking) to 384KB (for both cases). This increase allows IOO to optimize the buffer count for non-VSAM files more fully.

Note that even with this controlled increase in the bufferspace values, it is possible for an application that (1) uses a very large number of non-VSAM data sets, and (2) is close to exceeding the maximum possible region size, to in fact receive region abends.

In those cases, you can use the BUFNO parameter in IOO's Dynamic Control Facility (DCF) rules to reduce the non-VSAM bufferspace for those jobs. Otherwise, contact Customer Support for additional guidance.

General Information

Product Description

StarTool® Input/Output Optimizer (IOO) is an integrated performance optimizer that dynamically manages I/O buffering to improve throughput for batch and online processing. StarTool IOO gathers information during I/O requests to VSAM and SAM (QSAM, BSAM, and EXCP) data sets and uses this information to access a knowledge base of I/O processing rules. It implements selected rules to analyze all data set information available from the catalog, control blocks, and operating dynamics. StarTool IOO then builds an I/O environment for each data set that maximizes processing efficiency, and it adjusts performance criteria and operating conditions based upon I/O requests.

Release Summary

See "[New Features in StarTool IOO 3.1 Patch 7](#)" on [page 3](#) for a list of the enhancements in StarTool IOO 3.1 Patch 7. See "[Fixes in StarTool IOO 3.1 Patch 7](#)" on [page 3](#) for links to the defects that have been fixed in StarTool IOO 3.1 Patch 7.

Customer Support

- **Online Support** — The StarTool IOO Support website at <https://www.microfocus.com/en-us/support/StarTool%20IOO> provides an easy way for customers to manage their support cases, download

software patches, or search the Knowledge base for the latest technical information about our products at any time.

- A user ID and password are required to access some of the resources on the Micro Focus Support website. To obtain a user ID and password, sign up online or contact Customer Support by email or telephone.
- **Telephone Support** — Telephone contact numbers for Customer Support are posted by region at the following URL:

<https://www.microfocus.com/support-and-services/serena/>

No password is needed to access Customer Support contact information.

- **Authorized Support Representative** — Some support contracts specify that support calls will be centrally managed within the customer organization. This practice enables related issues to be aggregated across multiple customer sites or functional groups, and it ensures accountability for the satisfactory resolution of open issues. You should determine whether you have such a support contract before contacting Customer Support. If you do have such a contract, submit your support request to the designated support manager within your organization and arrange for that person to contact Customer Support.

New Features in StarTool IOO 3.1 Patch 7

There are no new features for this release.

Fixes in StarTool IOO 3.1 Patch 7

The following defects have been resolved in the StarTool 3.1 Patch 7 release.

<https://portal.microfocus.com/s/article/KM000025391>

New Features and Fixes in Previous StarTool IOO Releases

You can access the following links to review the features and fixes in previous StarTool IOO releases.

New Features in StarTool IOO 3.1 Patch 6

There were no new features for this release.

Fixes in StarTool IOO 3.1 Patch 6

<https://portal.microfocus.com/s/article/KM000003615>

New Features in StarTool IOO 3.1.5.02

<https://portal.microfocus.com/s/article/KM000003614>

Fixes in StarTool IOO 3.1.5.02

http://knowledgebase.serena.com/InfoCenter/index?page=content&cat=STRIOO_3.1.5.02_RESOLVED&channel=DEFECTS

New Features in StarTool IOO 3.1.5.01

<http://knowledgebase.serena.com/InfoCenter/index?page=content&id=S143105>

Fixes in StarTool IOO 3.1.5.01

http://knowledgebase.serena.com/InfoCenter/index?page=content&cat=STRIOO_3.1.5.01_RESOLVED&channel=DEFECTS

New Features in StarTool IOO 3.1.5

<http://knowledgebase.serena.com/InfoCenter/index?page=content&id=S143104>

Fixes in StarTool IOO 3.1.5

http://knowledgebase.serena.com/InfoCenter/index?page=content&cat=STRIOO_3.1.5_RESOLVED&channel=DEFECTS

Installation Considerations

You can download the distribution files for the StarTool IOO 3.1 Patch 7 release from the StarTool IOO Support Site (<https://www.microfocus.com/en-us/support/StarTool%20IOO>).

Before installing StarTool IOO 3.1 Patch 7

The StarTool IOO 3.1 Patch 7 is a full installation package.

Download the installation package

- Copy the IOO317Setup.EXE file from the StarTool IOO Download site to your PC and execute to extract the contents.

Install



NOTE Because this is not a patch install, but a full replacement installation, there is no need to carry forward previously delivered components (i.e. PANEL members, LOAD members, etc.) from previous StarTool IOO installs. Many components are obsolete and no longer being delivered. You will need to copy forward your site customizations as shown in the following sections.

This full package contains 11 files which are in "TSO transmit" binary format. You can transmit each of these files to the mainframe as follows.

Library	Contents
StarTool IOO Libraries	
STRIOO.V3R1M7.CLIST	CLISTs for controlling Dynamic Control Facility (DCF) functions.
STRIOO.V3R1M7.JCL	JCL for controlling StarTool IOO.
STRIOO.V3R1M7.LOAD	StarTool IOO load modules.
STRIOO.V3R1M7.MAC	StarTool IOO Assembler macros that you can customize.
STRIOO.V3R1M7.MSGS	StarTool IOO messages.
STRIOO.V3R1M7.PANELS	ISPF panels used for StarTool IOO.
STRIOO.V3R1M7.SKELS	StarTool IOO skeletons that are used in file tailoring.
STRIOO.V3R1M7.SRC	StarTool IOO source code that you can customize.
SERCOMC Libraries	
SERCOMC.V3R1M7.CNTL	JCL for applying the StarTool IOO license
SERCOMC.V3R1M7.LOAD	SERCOMC load modules
SERCOMC.V3R1M7.XML	XML NAMES file used for licensing.

Unloading the Distribution Files

Follow these instructions to copy the files from the StarTool IOO distribution media to your workstation:

- 1 Download the StarTool IOO 3.1 Patch 7 distribution files from the Serena Support website and execute the IOO317Setup.EXE file.

The installation wizard starts.

- 2 Follow the directions that the installation wizard displays. You will need to supply the following information:

- The location on your desktop computer where the installation files are to be copied. The default location is:
`C:\Program Files (x86)\OpenText\Startool IOO 3.1.7\`
- The symbolic name or dotted IP address of the host computer where the StarTool IOO product files are to reside.
- The Host Log-on ID. This is the TSO userid of the user who will be installing the product on the host. This userid must have authority to allocate files on the target host.
- The Transmitted File HLQ. This is the high-level qualifier for the sequential distribution files that will be uploaded to the host.
- The PDS Library HLQ. This is the high-level qualifier that is assigned to the product libraries that are created when you run the RECEIVE job to expand the transmitted sequential files into libraries on the host.

Follow these rules when you enter the high-level qualifiers for the transmitted files and libraries:

- Do not choose high-level qualifiers that create data set names that already exist on the host. The transmit and RECEIVE process overlays existing data sets.
- Your host userid must have authority to allocate files with these names.
- Do not add leading or trailing periods.
- Do not add parenthesis or quotes (single or double).
- The maximum length of the total data set name (high-level qualifier plus the StarTool IOO library name) is 44 characters.
- Case is not significant.

Editing the FTP Input File

The preceding step creates the following folder on your workstation:

`C:\Program Files (x86)\OpenText\Startool IOO 3.1.7\`

This entry has the following subentries:

Startool IOO 3.1.7 Subentry	Description
Documentation	Click this entry to display link to download the StarTool IOO documentation.
FTP.Bat	Click this entry to upload the sequential StarTool IOO files to the host.
FTP.Input	<p>Click this entry to display and edit the FTP commands that will be executed by the FTP.Bat procedure. You can open this file with any ASCII text editor, such as Notepad.</p> <p>The name or IP address of the target host, the TSO userid, and the file names in the PUT commands reflect the responses that you entered in response to the prompts that the Install Wizard issued when you unloaded the distribution files on your workstation.</p> <p>Replace the following entry on the 3rd line of the FTP.Input file with the password associated with the host userid given on line 2:</p> <p><PASSWORD></p> <p>and Save the file under the same name.</p> <p>IMPORTANT! After you upload the StarTool product files to the host, edit the FTP.Input file again, delete the password, and resave the file (for security reasons).</p>
Readme.htm	<p>Click this entry to display the readme file that is distributed with the product files.</p> <p>NOTE The readme file is updated if new information becomes available after the product has shipped. Check the StarTool IOO download area on the Serena Support website for possible readme updates.</p>
hlq.receive.V3R1M7.JCL	<p>Click this entry to display the list of RECEIVE commands that will be executed on the mainframe to expand the uploaded StarTool IOO product files into libraries on the host. You can open this file with any ASCII text editor, such as Notepad. This file is also uploaded to the HOST by FTP.Bat run.</p> <p>You need to add a valid JOB statement to this file. You can do this in the following ways:</p> <ul style="list-style-type: none"> You can edit the file and make this modification on the PC client and save the file before you upload it. You can edit the file with the ISPF editor and add the JOB statement on the host after you upload it.

Transferring Files to the Host

After you edit the FTP.Input file to add the password, you are ready to transfer files to the host. Note that your local system must be connected to the network for this transfer to work.

To transfer the files:

- 1 Navigate to C:\Program Files (x86)\OpenText\Startool IOO 3.1.7\FTP.Bat and execute to begin the file transfer. You will see the following message:

FTP process has begun.

This transfer may take several minutes. You will see the following messages when the file transfer is complete:

FTP process has completed.

```
FTP Execution Log: C:\Program Files (x86)\OpenText\Startool IOO 3.1.7\Ftp.log
Press any key to continue . . .
```

- 2 After the transfer completes, view the FTP log file to verify that the files were transferred to the host without error. To do this, open the Ftp.log file with any ASCII text editor. The location of this file is given in the second message displayed above. In this example, the Ftp.log file is located at:

```
C:\Program Files (x86)\OpenText\Startool IOO 3.1.7\Ftp.log
```

- 3 If any of the following errors appear, you must make corrections in the FTP.Input file and repeat Step 1 above.

Message	Corrective Action
Unknown Host	Verify the name or IP address of your host.
Invalid Command	Verify that you entered the correct TSO userid and password.
Not Connected	The FTP connection was lost so these files did not get uploaded. Verify that your local system is connected to the network and resubmit the FTP.Bat program.

Creating the StarTool IOO Libraries

The StarTool IOO installation process creates an hlq.RECEIVE.V3R1M7.JCL file using the high-level qualifier that you specified for the Transmitted File HLQ during the file-unload process. The hlq.RECEIVE.V3R1M7.JCL file contains RECEIVE commands to expand the uploaded sequential files into PDS libraries. The file is transferred to the host in ASCII format. You must add your JOB statement to this file (if you did not do so before you uploaded it) and submit the job on the host. To do this:

- 1 Sign on to the host.
- 2 Edit the hlq.receive.V3R1M7.JCL file and replace the following four lines with a valid JOB statement:

```
//JOB CARD 1
```

```
//JOB CARD 2
```

```
//JOB CARD 3
```

```
//JOB CARD 4
```

- 3 Submit the job.
- 4 Examine the libraries created with the host high-level qualifier to ensure that they are PDS libraries. They may not have been created successfully despite a return code of 0 or a job sysout message that says "Restore successful to data set..."

- 5 If you are satisfied that the StarTool IOO PDS libraries have been created successfully, continue to "Authorizing the Load Library" in the Installation and Setup Guide to complete the StarTool IOO installation.

The following macro and source members were changed in IOO 3.1.5.01 and IOO 3.1.5.02.

IOO 3.1.5.01 Changes

IOO macros #BYPASS and ULTIGBL were changed in IOO 3.1.5.01: library IOO315.MAC

The source for ULTIGBK0-5 and ULTITBK0-5 were also changed in IOO 3.1.5.01: library IOO315.SRC

IOO 3.1.5.02 Changes

IOO macros #BYPASS was changed in IOO 3.1.5.02: library IOO315.MAC.
Thus ULTITBK0-5 have been recompiled to pick up the new #BYPASS.

- 1 If you are upgrading from 3.1.5 GA (with no patch levels applied) to 3.1 Patch 7:
 - a Copy forward any custom modifications to the new versions of #BYPASS, ULTIGBL, ULTIGBK0-5 and ULTITBK0-5.
 - b Reassemble your global options - IOO315.JCL(IOOGASM)
 - c Reassemble your site options - IOO315.JCL(IOOTASM)
- 2 If upgrading from 3.1.5.01 to 3.1 Patch 7:
 - a Copy forward any custom modifications to the new versions of #BYPASS and ULTITBK0-5.
 - b Reassemble your site options - IOO315.JCL(IOOTASM).
- 3 If upgrading from 3.1.5.02 or 3.1 Patch 6 to 3.1 Patch 7, no pre-implementations steps are required. Simply copy forward any modified versions of the components listed above from your IOO 3.1.5.02 or 3.1 Patch 6 libraries.

Implement 3.1 Patch 7

- 1 Stop the IOO started task.
- 2 Make a backup copy of the running libraries affected by the fix.
 - IOO.CLIST
 - IOO.LOAD
 - IOO.MAC
 - SERCOMC.IOO.LOAD

- etc.

- 3** Copy the members and load modules from the temporary data sets into your running libraries.
- 4** Perform an IPL or refresh LLA. This is recommended before starting StarTool IOO 3.1.5.02 or later, and required if upgrading from a release prior to StarTool IOO 3.1.5. Performing an IPL is recommended. If you do not want to perform an IPL for any reason, refresh LLA.
- 5** Restart the IOO started task.

Software Compatibility

For a complete list of software requirements and product compatibility, see the product compatibility matrix spreadsheet on the Software Licenses and Downloads (SLD) website:

<https://sld.microfocus.com/mysoftware/index>

Storage Requirements

StarTool IOO allocates approximately 500K of 31-bit Extended Common Storage (ECSA) and 30K of 24-bit Common Storage (CSA) at startup. Within an application's address space, IOO allocates 24K for each open VSAM Access Control Block (ACB). Additional storage requirements vary dynamically based on the startup option chosen, the current application workload, and the optimization rules currently in force.

Other

Other compatibility requirements of StarTool IOO include:

Feature or Standard	Compatible Versions
Character Set	EBCDIC - Latin 1
3270 Emulation Code Page	037 U.S. English

Known Issues

No known issues exist in StarTool IOO 3.1 Patch 7.

Documentation Updates

StarTool IOO documentation is provided in Adobe® Portable Document Format (PDF). You can download it from the following website:

<https://www.microfocus.com/documentation/startool-ioo/>

Adobe® Reader® is available for free download at <http://get.adobe.com/reader/>. Version 9 or higher is recommended.

Additions and corrections to documentation can be issued after the product release date. Updated StarTool IOO Readme files and user manuals are published on the documentation website cited above with the rest of the documentation for the product release. Updated Readme files and user manuals are flagged with an **Updated** date in the file name or description.



NOTE Change bars in the left margin of StarTool IOO documentation identify substantive changes from the last published version, unless otherwise noted.

Searching the Documentation

There is no cross-book index for the StarTool IOO documentation suite. You can use the Advanced Search facility in Adobe Reader to search all StarTool IOO manuals in the same or subordinate folders for information that you want.

Documentation Changes Regarding StarTool IOO Messages

StarTool IOO messages now appear in the JESMSG LG. All references to messages appearing in JESYSMSG should be changed to JESMSG LG in the following StarTool IOO user manuals:

- Installation and Setup Guide
- Messages
- User's Guide