

StarTool® IOO 3.1.5.01 Readme

26 April 2018

This Readme file contains cumulative information for StarTool IOO releases 3.1.5.01 and 3.1.5.

StarTool IOO 3.1.5.01 patch release contains only the changes that have been made to product files since StarTool IOO 3.1.5. See "[Installation Considerations](#)" on page 6 for instructions on downloading and installing StarTool IOO 3.1.5.01.



NOTE Sites that are running z/OS 2.2 and above should install this IOO 3.1.5.01 patch release. Otherwise, IOO messages will not appear even though IOO is optimizing.



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 Care for support.

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 3.1.5.01" on page 3 for a list of the enhancements in StarTool IOO 3.1.5.01. See "Fixes in IOO 3.1.5.01" on page 5 for links to the defects that have been fixed in StarTool IOO 3.1.5.01.

Customer Care

- **Online Support** — The Micro Focus SupportLine website at <http://supportline.microfocus.com> provides an easy way for customers to manage their support cases, download software patches, or search the Knowledgebase for the latest technical information about our products at any time.
- A user ID and password are required to access the Micro Focus SupportLine website. To obtain a user ID and password, sign up online or contact Customer Care by email or telephone.
- **Telephone Support** — Telephone contact numbers for Customer Care are posted by region at the following URL:

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

No password is needed to access Customer Care contact information.

- **Email Support** — Customers can send support requests by email to customercare@microfocus.com.
- **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 Care. 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 Care.

New Features in StarTool IOO 3.1.5.01

The following features are new in StarTool IOO 3.1.5.01:

Default EREGION Value Has Been Increased

The default EREGION value in the Global Rules Table has been changed from 64MB to 96MB.

StarTool IOO Messages Now Appear in JESMSG LG

StarTool IOO messages used to appear in JESYSMSG output. The messages are now written to JESMSG LG.

New Message in StarTool IOO 3.1.5.01

The following message is new:

```
SZI054mt  job, step, dd, pgmname, volser, Optimization attempt bypassed,
          ffffffff, RULE=rule, dsname, TIME=hh:mm:ss, DATE=yyyy/mm/dd
```

Explanation: Issued by program ULTI200. Optimization of the data set has been bypassed because the VSM Step Table is full. As a workaround, restart IOO or the job described in this message. Reference the job log for additional messages describing the error.

m IOO's startup mode:

- E: Exempt mode
- M: Mixmod mode
- S: Select mode

t Message type:

- E: Error
- I: Informational
- W: Warning.

job Job name.

step Step name.

dd DDname.

pgmname Program name.

volser Residency volume serial number of the optimized data set.

fffffff IOO flags (See *StarTool IOO Messages*, Appendix C: Format of the IOO Flag Bytes.).

rule Name of the selected IOO optimization rule.

dsname Name of the optimized data set.

TIME= Time of the optimization. Present only if the message is directed to DDname.

DATE= Date of the optimization. Present only if the message is directed to DDname.

New Features in StarTool IOO 3.1.5

The following features are new in StarTool IOO 3.1.5.

Dynamic Memory Management (DMM) Considerations

A new FACILITY operand has been added to the ULTIGBL macro. When you start StarTool IOO, and SETRGN=YES is specified in the global table source or GBT SETRGN=YES is specified in the Dynamic Control Facility (DCF) input, IOO will ask RACF if the facility profile name specified by the FACILITY operand exists. If the profile does exist, DMM will be activated. If the profile does not exist DMM will not be activated. See the *StarTool IOO 3.1.5 User's Guide* for details.

When DMM tracing is requested, IOO produces tracing messages to document the effect that tracing has had on the region size. These messages have been updated to improve comprehension.

Greater Transparency in Job Selection

When DCF tracing is turned on, the original rule text is presented as rules are evaluated.

Improvement in DCB Optimization

When IOO optimizes a DCB by increasing the number of buffers (DCFBUFNO), it will now try to ensure that the increase will not cause a lack-of-storage condition.

IOO Optimization Report Suppression Is Now Documented with Message SZIST00I

IOO produces a report to document its optimization of VSAM ACBs. This report is suppressed if the number of EXCPs to the data component is less than the value specified by the STATTHLD keyword in the Global Rules Table. When that suppression occurs, message SZIST00I is issued by way of explanation.

Other Changes

- All Global Rules Table keyword values that are in effect are now reported during IOO initialization.
- Potential SOC4s are prevented when IOO reinitializes.
- The way that IOO loads its modules into common storage is improved.

- Several new messages have been added and updated to improve IOO operational transparency. These messages are documented in the *StarTool IOO 3.1.5 Messages* manual.

Fixes in IOO 3.1.5.01

Access the following link for a list of defects and description of the fixes in StarTool 3.1.5.01:

http://knowledgebase.serena.com/InfoCenter/index?page=content&cat=STRI00_3.1.5.01_RESOLVED&channel=DEFECTS

Fixes in IOO 3.1.5

Access the following link for a list of defects and description of the fixes in StarTool 3.1.5:

http://knowledgebase.serena.com/InfoCenter/index?page=content&cat=STRI00_3.1.5_RESOLUTIONS&channel=DEFECTS

Installation Considerations

The distribution files for the StarTool IOO 3.1.5.01 patch release contain only the changes that have been made to product files since the StarTool IOO 3.1.5 release. You can download the distribution files for the StarTool IOO 3.1.5.01 patch release from patch ID [P2812](#).



NOTE If you are replacing a version of StarTool IOO that is older than version 3.1.4, you will need to obtain a new license key. Contact Customer Care.

Follow the instructions in the *StarTool IOO 3.1.5 Installation and Setup* manual to install StarTool IOO.

Software Compatibility

For a complete list of software requirements and product compatibility, refer to the Platform Matrix for StarTool IOO 3.1.5.01 at the following location on the Micro Focus SupportLine website:

<https://supportline.microfocus.com/prodavail.aspx>

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 3.1.5.01.

Documentation Updates

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

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

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 Micro Focus 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*