Debugging & Traceability

This information describes the tracing and debugging facilities that are available with SA z/OS.

To collect debugging information you can also use the command INGLKUP REQ=COLLECT.

* [**Automation Manager State Trace Table**](https://www.ibm.com/docs/en/SSWRCJ_3.5.0/com.ibm.safos.doc_3.5/UserGuide/Automation_Manager_State_Trace_Table.html)  
  The event handler trace back table is written to SYSLOG or to the Message Logger. It is the most important debug tool when you want to understand the event flow.
* [**Using Trace Services for the Automation Manager**](https://www.ibm.com/docs/en/SSWRCJ_3.5.0/com.ibm.safos.doc_3.5/UserGuide/Using_Trace_Services_for_the_Automation_Manager.html)  
  To trace the control flow of a process, SA z/OS uses the **MVS™ Component Trace Facility** with all its capabilities.
* [**Using AOCTRACE**](https://www.ibm.com/docs/en/SSWRCJ_3.5.0/com.ibm.safos.doc_3.5/UserGuide/aoctrace_userguide.html)  
  You can use the AOCTRACE command to enable or disable the automation debugging facility, either globally or for specific clists (REXX routines).
* [**How to Use a Log with INGHIST**](https://www.ibm.com/docs/en/SSWRCJ_3.5.0/com.ibm.safos.doc_3.5/UserGuide/How_to_Use_a_Log_with_INGHIST.html)  
  With the INGHIST command you can display a log with automation manager messages by entering INGHIST REQ=LOG at the command line.
* [**How to Use the Diagnostic Option of INGAMS**](https://www.ibm.com/docs/en/SSWRCJ_3.5.0/com.ibm.safos.doc_3.5/UserGuide/How_to_Use_the_Diagnostic_Option_of_INGAMS.html)  
  From the INGAMS command dialog, you can select option **D Diagnostic**.
* [**Tracing and Debugging for ProcOps and the BCP Internal Interface**](https://www.ibm.com/docs/en/SSWRCJ_3.5.0/com.ibm.safos.doc_3.5/UserGuide/Tracing_and_Debugging_for_ProcOps_and_the_BCP_Internal_Interface.html)  
  The following trace facilities are provided for ProcOps SNMP connections and the BCP Internal Interface that you can use for problem determination purposes.
* [**Using Trace Services for I/O Operations**](https://www.ibm.com/docs/en/SSWRCJ_3.5.0/com.ibm.safos.doc_3.5/UserGuide/Using_Trace_Services_for_IO_Operations.html)  
  To trace the control flow of I/O operations, SA z/OS uses the MVS Component Trace Facility with all its capabilities.
* [**Collecting the available BCPII session status messages**](https://www.ibm.com/docs/en/SSWRCJ_3.5.0/com.ibm.safos.doc_3.5/UserGuide/Collecting_the_available_BCPII_session_status_messages.html)  
  In case of BCPii session problems, make sure you have collected all SA z/OS WTO messages (msgids ING81\*) at the time of the error, that are issued in the SA z/OS NetView domain, where the error occurred. Report these messages (Syslog,Netlog) in case you need to contact IBM® Support.