



Architect of an Open World™

TDS SAP

SAP is one of the principal providers of ERP (Enterprise Resource Planning) software. Associating the GCOS 7 mainframe environment to that of SAP allows the information system to benefit from the power of mainframe applications and also of those developed using SAP, thus contributing to the improvement of company productivity. The aim of TDS-SAP is to ensure the interoperability of GCOS 7 and SAP applications.

The TDS-SAP solution is intended for companies wanting to integrate their GCOS 7 applications into the SAP environment.

The TDS-SAP solution allows:

- The exchange of information between GCOS 7 and SAP applications
- SAP applications to access critical data stored on GCOS 7.

In particular the TDS-SAP solution allows:

- The activation of chosen SAP services from an application installed on GCOS 7
- The execution of GCOS 7 transactions from a SAP service.

The TDS-SAP solution is based on two connectors:

- 1 GCOS 7 connector to SAP based on the architecture of Bull's Universal Interface
- 1 SAP connector to TDS.

TDS Connector to SAP

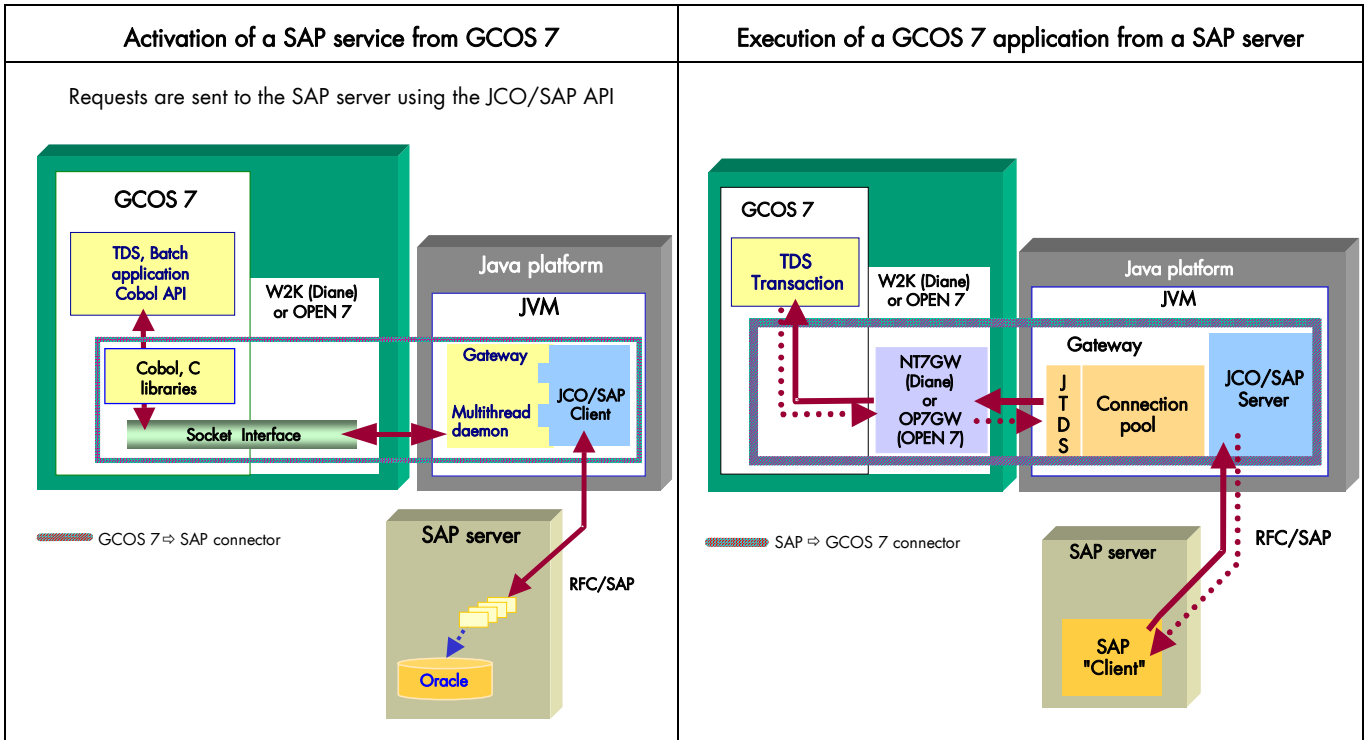
- Libraries of C and Cobol functions to be installed on GCOS 7: the C and Cobol APIs for accessing SAP functions from a GCOS 7 application.
- A Java gateway to be installed on a Java platform serving as intermediary between GCOS 7 and the SAP server: the Java gateway and the SAP server can co-exist on the same platform.

SAP Connector to TDS

- A Java gateway which receives SAP requests and executes the associated TDS transactions. It is installed on a Java platform serving as intermediary between GCOS 7 and the SAP server.
- The Bull product JTDS which allows the gateway to connect to TDS.

Note that the gateway and the SAP server can co-exist on the same platform.

Architecture



RFC/SAP : Remote Function Call of SAP
JCO/SAP : Java connector to and from SAP used in a server listening for SAP requests
JTDS : Standard Bull product (Java interface for accessing GCOS 7 applications) for integration into a JVM, or HooX (standard J2EE™ Connector Architecture connector to GCOS 7) for integration into a J2EE™ Application Server

Technical specifications

ENVIRONMENT

GCOS 7 (DPS 7000/TA, DPS 7000/XTA and NovaScale 7000)

Cobol Batch available in service mode
 TDS TS9920

Java Platform (where the gateway is installed)

JDK 1.4
 Java gateway available in service mode

Sap server

SAP 4.6 or greater

Bull Validation

SAP 4.6C with JCO interfaces

Communications

TCP/IP network

FUNCTIONS

Generic Cobol API (from TDS to SAP)

The functions of the Cobol API are listed below:

- **WS-CONNECT**
to connect to a SAP service
- **WS-SET-REQUEST**
to specify the SAP service required
- **WS-SET-PARAMETER**
to specify an input parameter of the SAP service
- **WS-INVOKE**
to activate a SAP service
- **WS-GET-PARAMETER**
to obtain an output parameter
- **WS-DISCONNECT**
to disconnect from a SAP service
- **WS-CALL**
to call a SAP service based on the preceding API functions

For further information, contact your commercial interface or the NovaScale GCOS Competence Center.