



# CERTIFICATE

## SAP INTEGRATION CERTIFICATION

**SAP**® Certified  
Integration with SAP NetWeaver®

### **SAP AG**

hereby confirms that the software component **Interface for IBM Content Collector** version **V2.2** for the product **IBM Content Collector** version **V2.2** of the company

#### **IBM Deutschland Research & Development**

has been certified for integration with **SAP NetWeaver 7.01** via the SAP integration scenario **BC-ILM 2.0 (SAP NetWeaver Information Lifecycle Management)**.

This certificate solely confirms the existence of the integration in accordance with SAP certification procedures and the respective integration scenario. The certificate does not refer to the quality of the Vendor Solution nor does it guarantee any legal compliance of the Vendor product when implemented and used. Please acknowledge that this certificate does not represent any assurance that the Write Once Read Many (WORM) capabilities of the storage system are maintained at all times. This requires a special verification and tests. Independent tests or certificates should be used to verify the capabilities of the Vendor Solution.

The certification test is documented in report no. **14017886** and expires Februar 7, 2014.

Vendor Hardware: Intel Xeon  
Operating system: Windows Storage Server 2008  
Storage System used: N/A

This configuration meets the requirements for connecting **IBM Content Collector** to SAP NetWeaver™.

#### **Certified Functions:**

WebDAV Storage interface, Server functionality  
WebDAV Storage Interface LOAD Test performed  
Solution Manager Ready functionality

Walldorf, Februar 8, 2011

Dirk Michael Schulze - SAP AG

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## Interface Certification

### **BC-ILM 2.0 WebDAV Storage Interface for ILM Solution from SAP Windows 2008 Test Report**



Version 7.01

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## Interface Certification (Activity #) 14017886

SAP Interface incl. Release: BC-ILM 2.0  
SAP Product incl. Release: SAP NetWeaver 7.01

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Name of Vendor: IBM Deutschland Research & Development  
Vendor Number: 9675429

Vendor Product Name: IBM Content Collector  
Vendor Product Version: V2.2  
Vendor Product Number (SAP internal): 9249194

Vendor SW Component Name: Interface for IBM Content Collector  
Vendor SW Component Version: V2.2

Hardware used for Vendor Test System: Intel Xeon  
Operating System of Vendor Test System: Windows Storage Server 2008  
Storage System used for Test: N/A

Certification Date: Februar 8, 2011  
Expiration Date: Februar 7, 2014  
Location: Walldorf  
Persons present - Vendor: Mr. Siegfried Beuttler  
Mr.

Persons present - SAP: Dirk Michael Schulze - SAP AG

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Certified Functions:  WebDAV Storage interface, Server functionality  
 WebDAV Storage Interface LOAD Test performed  
 Solution Manager Ready functionality

26 Sec for 1 data file à 500MB  
640 Sec for 10.000 data files à 100KB (1GB total)  
10800 Sec for 100.000 data files à 100KB (10GB total)

23,7 MB/sec (Concurrent Load Measurement throughput on PUT)  
19,3 MB/sec (Concurrent Load Measurement throughput on GET)  
7309 MB/sec (Concurrent Load Measurement throughput on DELETE)  
3852 ms (throughput on Store Phase Simulation)  
8445 ms (throughput on Attachment Simulation)

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## 1. Principle Requirements for the functional Test

Function	Chapter in test catalog	Rating	Note
ILM Components as of AS Java 7.01 based on NW 7.0 SP14 installation	2 Step 1	O.K.	
Deployment of Certification Test Suite (CertificationSuite_SDAS.ZIP)	2 Step 2	O.K.	
WebDAV System Configuration	2 Step 3	O.K.	

Additional comments:  
none

## 2. Configuration Setup (Standard Configuration)

Function	Chapter in test catalog	Rating	Note
Creating User XMLDAS	5.1.1	O.K.	
Creating Destination	5.1.2	O.K.	
Configuring the XML Data Archiving Service	5.1.3	O.K.	

Additional comments:  
none

## 3. Additional Certification Setup

Function	Chapter in test catalog	Rating	Note
Requirements for the Load Test	3.8	O.K.	

Additional comments:  
none

#### 4. Test Execution - Basic Authentication Test

Function	Chapter in test catalog	Rating	Note
Requests issued with incorrect credentials	6.1	O.K.	
Successful connect	6.1	O.K.	

Additional comments:  
none

#### 5. Acceptance Test

Function	Chapter in test catalog	Rating	Note
Test Suite execution successful	6.2	O.K.	
Single Test execution (Since a DELETE request may take at least three days after we can finally check this we need to receive a written report (screenshot) in order to check the DELETE function properly)	7	O.K.	

Additional comments:  
none

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 Requirements detailed in Section 3 were met. On the certificate the entry „ WebDAV for Data Archiving, Server functionality “appears under „Certified functions“.

Requirements detailed in Section 3 were not met. A new testing appointment was agreed for <Date Retest>.

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## 6. Data Archiving Load Test - System Environment details

### A. VENDOR SYSTEM

<b>WebDAV Server OS:</b>	<b>Windows 2008 64Bit</b>
<b>Number of CPU's:</b>	<b>4</b>
<b>CPU Speed:</b>	<b>2GHz</b>
<b>Total Main Memory:</b>	<b>13 GB</b>
<b>Database:</b>	<b>Vendor own DB DB Name</b>

### B. SAP SYSTEM

<b>SAP System Release:</b>	<b>SAP NetWeaver 7.01</b>
<b>Operating System:</b>	<b>Windows 2008 64Bit</b>
<b>Number of CPU's:</b>	<b>2</b>
<b>CPU Speed:</b>	<b>2 Ghz</b>
<b>Total Main Memory:</b>	<b>13 GB</b>
<b>LAN-Speed:</b>	<b>local</b>
<b>Database:</b>	<b>DB2 9.7</b>

## 1. Data Archiving Load Test

This Test Sequence has been divided in two separate sections first we start a load-test sequence from the XML-DAS Test-Suite the results will be captured in Section “Standard Load Test”. The second load-test sequence will be started with an external tool (bcilmcert.jar) the results will be captured in Section “External Load Test”.

### *Standard Load Test (XML-DAS Test-suite)*

A Data Archiving run will be simulated with three high load data packages. In the first run a 500MB data file will be archived once, in the second run a 100KB data file will be archived 10.000 times and in the third step a 100KB data file will be archived 100.000 times.

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#### First run:

**Number of Data-files:** 1  
**Data file size total:** 500 MB  
**Archiving time:** 26 seconds  
  
**Step was successful:** Yes  
**Remarks:**

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#### Second run:

**Number of Data-files:** 10.000 (100KB each)  
**Data file size total:** 1 GB  
**Archiving time:** 640 seconds  
  
**Step was successful:** Yes  
**Remarks:**

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#### Third run:

**Number of Data-files:** 100.000 (100KB each)  
**Data file size total:** 10 GB  
**Archiving time:** 10800 seconds  
  
**Step was successful:** No  
**Remarks:** WebDAV Server gets too few requests after several thousand calls from JEE.



### *External Load Test (productive simulation)*

In addition to the above measured results it is extremely important to guarantee that all Data handled via the XML Data Archiving Service are completely, safely and in a fairly amount of time stored in final destination. Therefore we developed a mandatory functional requirement where we simulate a productive storage scenario to the tested Vendor Storage System and measure the time needed to successfully pass each separate task within this Load-Test. KPI's has been defined to make sure that each tested system reaches this numbers at the various test cases.

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#### **ILM Concurrent Load Measurements:**

<b>Throughput on PUT:</b>	<b>23,7 MB/sec</b>
<b>Throughput on GET:</b>	<b>19,3 MB/sec</b>
<b>Throughput on DELETE:</b>	<b>7309 MB/sec</b>

*Estimated throughput KPI on PUT/GET: 5MB/s throughput on 100MB Resource 5 Tasks/ 5 Iterations (80% on 5th Task), Heterogenic Content Structure*

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#### **ILM Store Phase Simulation:**

<b>Throughput:</b>	<b>3852 ms</b>
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*Estimated throughput KPI: 5 sec*

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#### **ILM Attachment Simulation:**

<b>Throughput:</b>	<b>8445 ms</b>
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*Estimated throughput KPI: 10 sec*

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Requirements detailed in Section 7 were met. On the certificate the entry „ Data Archiving LOAD Test performed “appears under „Certified functions“.

Requirements detailed in Section 3 were not met. A new testing appointment was agreed for <Date Retest>.

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