RESOURCES

http://help.sap.com/bobip42

See: Business Intelligence Platform Administrator Guide (Chapters 23 – 24)
SAP WEBINAR

https://youtu.be/l19G2JEWb9Q

SAP Business Intelligence 4.2: New Auditing Universe and Reports

ADAM@ALANGECONSULTING.COM
WHAT IS AUDITING?

The SAP BI platform can record activity on the system, such as:

– Which users are logging in and when?
– Which reports are being run and by whom?
– Who deleted an object?
– Who is creating or modifying reports?
– And so on...

• Does **not** record system content, security, metadata
AUDIT ≠ CMS

The audit database records activity.

The CMS database records content and configurations.
## Status Summary

<table>
<thead>
<tr>
<th>ADS Last Updated On</th>
<th>CMS Auditor</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/6/18 7:37:40 AM GMT-07:00</td>
<td>[REDACTED]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Auditing Thread Utilization (%)</th>
<th>ADS Database Connection Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>BI4_Audit_DSN</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Last Polling Cycle Duration (Seconds)</th>
<th>ADS Database User Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>180</td>
<td>dba</td>
</tr>
</tbody>
</table>

## Set Events

- Common Events:
  - View
  - Refresh
  - Prompt
  - Create
  - Delete
  - Modify
  - Save
  - Search
  - Edit
  - Run
  - Deliver
  - Retrieve
  - Logon
  - Logout
  - Trigger
  - Recycle
  - Restore

## Set Event Details

- Query
- User Group Details
- Folder Path Details
- Rights Details
- Property Value Details

## Configuration

### ADS Database
- Connection Name: BI4_Audit_DSN
- Type: SQL Anywhere
- Use Windows Authentication: [ ]
- User Name: [REDACTED]
- Password: [REDACTED]
- Delete Events Older Than (Days): 36500
- ADS Auto Reconnect: [ ]
ODBC

Configure 32-bit and 64-bit ODBC connections to the audit database

<table>
<thead>
<tr>
<th>Name</th>
<th>Platform</th>
<th>Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI4_Audit_DSN</td>
<td>32-bit</td>
<td>SQL Anywhere 17</td>
</tr>
<tr>
<td>BI4_Audit_DSN</td>
<td>64-bit</td>
<td>SQL Anywhere 17</td>
</tr>
</tbody>
</table>

ADAM@ALANGECONSULTING.COM
Download auditing universe and reports (LCMBIAR files) and install via Promotion Management in CMC


ADAM@ALANGECONSULTING.COM
Retrieve a list of Web Intelligence reports viewed (i.e. opened) since February 1, 2018.
AUDIT UNIVERSE

List of users logged in since January 1, 2018.

ADAM@ALANGECONSULTING.COM
List of users from the Finance Universe Group who have logged in since January 1, 2018.
AUDIT DATABASE TABLES

**ADS_Event**: Main log table

**ADS_Event_Type_Str**: View, Delete, Logon, etc.

**ADS_Object_Type_Str**: User, Web Intelligence, etc.

**ADS_User**: Table of users and user names

**ADS_Event_Detail**: Supplemental information about each transaction, e.g. universe name, user group

*This is a partial list of tables in the Audit (ADS) database*
* This is a partial list of tables in the Audit (ADS) database

- ADS_EVENT
This is a partial list of tables in the Audit (ADS) database.
This is a partial list of tables in the Audit (ADS) database

AUDIT DATABASE TABLES *

ADS_EVENT_TYPE_STR
ADS_OBJECT_TYPE_STR

ADS_EVENT
This is a partial list of tables in the Audit (ADS) database:

- ADS_EVENT
- ADS_EVENT_TYPE_STR
- ADS_OBJECT_TYPE_STR
- ADS_USER
This is a partial list of tables in the Audit (ADS) database

- ADS_EVENT_TYPE_STR
- ADS_OBJECT_TYPE_STR
- ADS_USER
- ADS_EVENT_DETAIL

* This is a partial list of tables in the Audit (ADS) database
*This is a partial list of tables in the Audit (ADS) database*
AUDIT SQL EXAMPLES *

SELECT
    E.User_Name,
    MAX(E.Start_Time) Most_Recent_Logon,
    COUNT(*) Logins
FROM
    ADS_EVENT E INNER JOIN
    ADS_EVENT_TYPE_STR T ON E.Event_Type_ID = T.Event_Type_ID AND T.Language = 'EN'
WHERE
    T.Event_Type_Name = 'Logon'
    AND E.User_Name <> ''
    AND E.User_Name IS NOT NULL
    AND E.Start_Time >= CONVERT(DATETIME,'11/01/2017',101)
GROUP BY
    E.User_Name

* Syntax applicable to SQL Anywhere
SELECT
E.Object_ID,
E.Object_Name Report_Name,
FOLDER1.FOLDER_NAME + ISNULL(' > ' + FOLDER2.FOLDER_NAME, '') Folder,
COUNT(*) Runs,
COUNT(DISTINCT E.User_Name) Users,
MAX(CAST(FLOOR(CAST(E.Start_Time AS FLOAT)) AS DATETIME)) Last_Opened
FROM
ADS_EVENT E INNER JOIN
ADS_EVENT_TYPE_STR T ON E.Event_Type_ID = T.Event_Type_ID AND T.Language = 'EN' INNER JOIN
ADS_OBJECT_TYPE_STR O ON E.Object_Type_ID = O.Object_Type_ID AND O.Language = 'EN' LEFT JOIN
(SELECT F1.Object_ID, MAX(F1.Object_Name) FOLDER_NAME
FROM ADS_EVENT F1 INNER JOIN ADS_OBJECT_TYPE_STR O1 ON F1.Object_Type_ID = O1.Object_Type_ID AND O1.Language = 'EN'
WHERE O1.Object_Type_Name LIKE '%Folder%'
GROUP BY F1.Object_ID) FOLDER1 ON E.Top_Folder_ID = FOLDER1.Object_ID LEFT JOIN
(SELECT F1.Object_ID, MAX(F1.Object_Name) FOLDER_NAME
FROM ADS_EVENT F1 INNER JOIN ADS_OBJECT_TYPE_STR O1 ON F1.Object_Type_ID = O1.Object_Type_ID AND O1.Language = 'EN'
WHERE O1.Object_Type_Name LIKE '%Folder%'
GROUP BY F1.Object_ID) FOLDER2 ON E.Folder_ID = FOLDER2.Object_ID
WHERE
O.Object_Type_Name = 'Web Intelligence'
AND T.Event_Type_Name = 'View'
GROUP BY
E.Object_ID,
E.Object_Name,
FOLDER1.FOLDER_NAME + ISNULL(' > ' + FOLDER2.FOLDER_NAME, '')
ORDER BY
COUNT(*) DESC

* Syntax applicable to SQL Anywhere
Comments posted on Web Intelligence reports are stored in the **Commentary_Master** table.

SQL Statements:

```sql
SELECT * FROM COMMENTARY_MASTER
```

<table>
<thead>
<tr>
<th>CommentID</th>
<th>DocId</th>
<th>CommentText</th>
<th>UserCuid</th>
<th>UserName</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AbVEyw3VMthHivaLoOOFvvU</td>
<td>We should look to add a waterfall chart as well.</td>
<td>AfRWaT5_131NILLf5bRMLKYY</td>
<td>Administrator</td>
</tr>
<tr>
<td>2</td>
<td>AbVEyw3VMthHivaLoOOFvvU</td>
<td>Wow! Let’s look at expansion opportunities soon.</td>
<td>AfRWaT5_131NILLf5bRMLKYY</td>
<td>Administrator</td>
</tr>
<tr>
<td>3</td>
<td>AbVEyw3VMthHivaLoOOFvvU</td>
<td>New Text</td>
<td>AfRWaT5_131NILLf5bRMLKYY</td>
<td>Administrator</td>
</tr>
<tr>
<td>4</td>
<td>AXccOwXFcThLhiJ4otuiSI</td>
<td>This is a comment about how comments are the new comment!</td>
<td>AfRWaT5_131NILLf5bRMLKYY</td>
<td>Administrator</td>
</tr>
<tr>
<td>5</td>
<td>AXccOwXFcThLhiJ4otuiSI</td>
<td>test</td>
<td>AfRWaT5_131NILLf5bRMLKYY</td>
<td>Administrator</td>
</tr>
<tr>
<td>6</td>
<td>AXccOwXFcThLhiJ4otuiSI</td>
<td>test</td>
<td>AfRWaT5_131NILLf5bRMLKYY</td>
<td>Administrator</td>
</tr>
<tr>
<td>7</td>
<td>AWJLkyKXaR5OuVF5_6mkjKY</td>
<td>test</td>
<td>AfRWaT5_131NILLf5bRMLKYY</td>
<td>Administrator</td>
</tr>
</tbody>
</table>
NEXT STEPS

1) Download and review BI Platform Admin Guide (Chapters 23 – 24)
2) Create 32-bit and 64-bit ODBC
3) Set auditing parameters in CMC
4) Install SAP auditing universe and sample reports

ADAM@ALANGECONSULTING.COM
Q&A