Microsoft Excel 2007 & SAP Business Explorer Compatibility

Update on Latest Developments

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RIG PRESENTATION

THE BEST-RUN BUSINESSES RUN SAP™

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Agenda

1. **Overview**
2. SAP BEx Analyzer 3.5 & Microsoft Excel 2007
3. SAP BEx Analyzer 7.0 & Microsoft Excel 2007
4. Wrap Up

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Microsoft Excel 2007

There are key differences in Microsoft Excel 2007 affecting SAP Business Explorer (BEx) integration:

- Shape handling – Microsoft completely re-wrote the shape rendering engine for Microsoft Office 2007
- Add-in handling – new add-in ribbon technology
- Security handling – newly implemented “Trust Center”
- New file formats (.xlsx, .xlsm, .xlsb)
- Compatibility mode to work with .xls files

The following link outlines the basic differences in Microsoft Excel 2007:
http://technet.microsoft.com/en-us/library/cc179188.aspx

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SAP Business Explorer (BEx) for SAP GUI 7.10

There are two versions of SAP Business Explorer versions SAP GUI for Windows **7.10**. Program corrections are referred to as front-end patches (FEP):

- BI 7.0 Add-on
  - Online documentation SAP Business Explorer Analyzer 7.0
  - Current front-end patch level 1200 (released 2010-04-01)
- BW 3.5 Add-on
  - Online documentation SAP Business Explorer Analyzer 3.5
  - Current front-end patch level 9 (released 2010-05-21)

Latest front-end patches can be downloaded from the SAP Service Marketplace

- Software Download Center for SAP GUI 7.10
  (includes links to BI and BW Add-on patches)

Known Limitations

- SAP Note 1175947 Known Limitations of the 3.5 & 7.0 Analyzer with Excel 2007

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SAP Business Explorer (BEx) for SAP GUI 7.20

Note:

SAP GUI 7.20 is available now. The remainder of this presentation refers to SAP Business Explorer for SAP GUI 7.10 only.

The initial release of SAP Business Explorer for SAP GUI for Windows **7.20** contains most of the corrections for SAP GUI 7.10 already.

Additional program corrections for SAP GUI 7.20:

- BI 7.0 Add-on
  - Current front-end patch level 100 (released 2010-04-30)
- BW 3.5 Add-on
  - None available yet

Additional more information see SDN:

http://www.sdn.sap.com/irj/sdn/index?rid=/webcontent/uuid/d0bcc9b5-ed2f-2b10-40a3-ee5f49d13059 (BEx 7.x)

http://www.sdn.sap.com/irj/sdn/index?rid=/webcontent/uuid/a06ba06b-1566-2b10-38b7-ad0b9023115d (BEx 3.5)

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SAP BEx Analyzer 3.5 & Microsoft Excel 2007 Compatibility

Limitations

- New Microsoft Excel 2007 file formats are NOT supported
- Performance degradation in Workbook refresh due to changes in the Microsoft Office 2007 Shape Rendering Engine
  - Shape management issue was corrected in FEP 4 (to remove shapes in the workbook before data is refreshed)
  - Workaround has been introduced in FEP 6 (see SAP Note 1300881)

Recommendations

- Minimum of BW 3.5 Add-on FEP 4 is required
- Refer to SAP Note 1118754 for the release schedule for 3.5 FEPs.
- Apply latest FEP available for BW 3.5 Add-on
- Apply the KB Articles noted below

Microsoft KB Articles

956798 Aug 2008 Hot Fix for Microsoft Excel 2007

956634 Details on enabling the Aug Hot Fix

959640 Dec 2008 Hot Fix for Microsoft Excel 2007

961400 Details on enabling the Dec Hot Fix

Important SAP Notes

1052761 Workbooks saved in the new file formats of Excel 2007 using 3.5 Analyzer are corrupted

1252307 Analyzer(3.5) takes much time to open Workbook from Excel 2007

1252724 Currency Symbol $ is not displayed in Excel 2007

1277992 Drilldown takes much time in 3.5 Analyzer with Excel 2007

1300881 BEx Analyzer 3.x: Suppressing hierarchy symbols

1310400 Hierarchy Icons are not shown as expected in Excel 2007

1300407 Issue in printing WB while Analyzer is loaded in Excel 2007

1315609 VB run time error at the time of creating a graph in Excel2007

1345468 BExAnalyzer: context sensitive double click on hier. nodes

1364801 Performance of 3.5 Analyzer with Excel 2007 is improved

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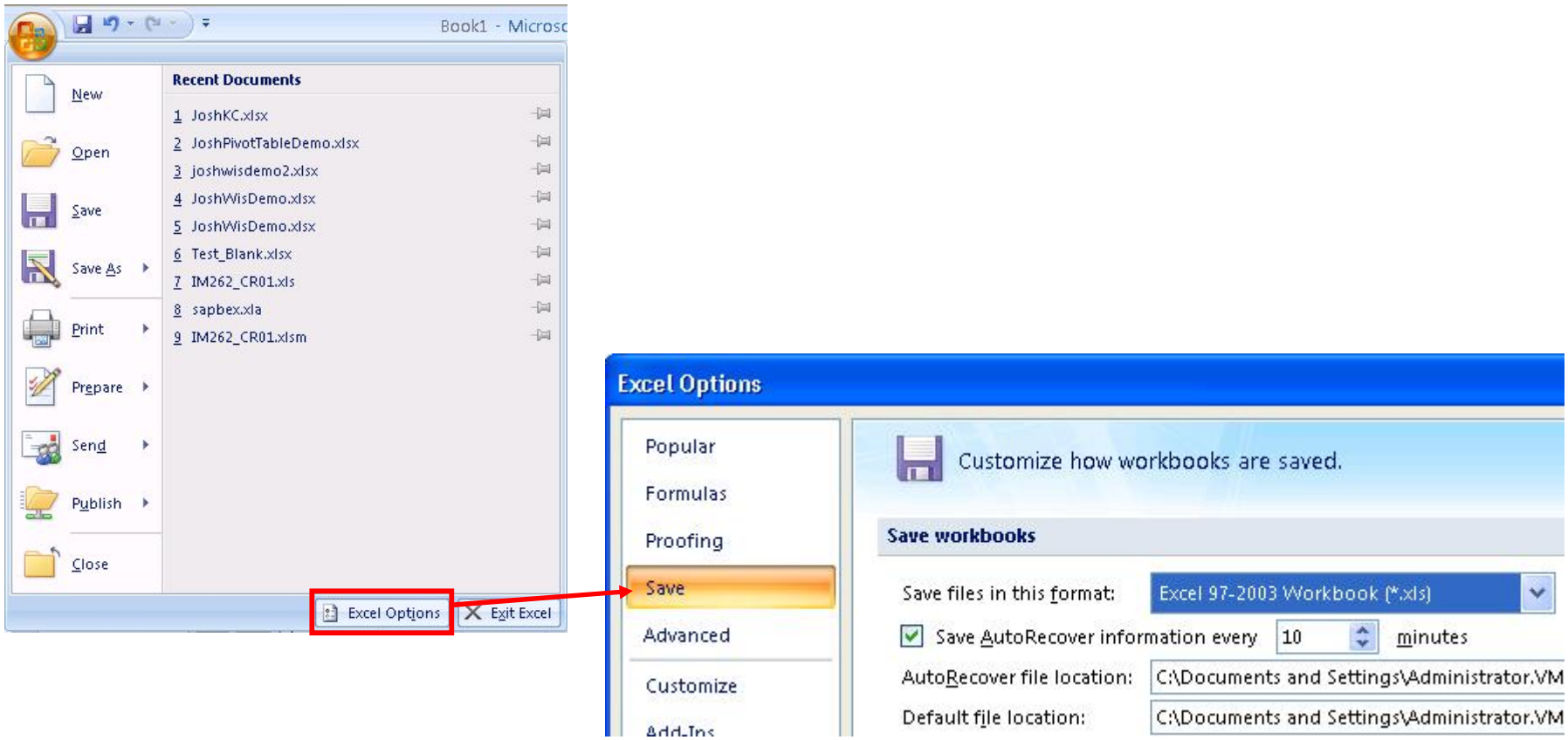
3.5 BEx Analyzer & Microsoft Excel 2007 – Avoid saving corrupted workbooks

- Workbooks saved in the new file formats of Microsoft Excel 2007 using 3.5 Analyzer are corrupted
- To avoid this, follow instructions in Note 1052761



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3.5 BEx Analyzer & Microsoft Excel 2007 – Navigating Hierarchies

Due to performance issues in the Microsoft Office 2007 Shape Rendering Engine, SAP has introduced a workaround in FEP 6 to navigate hierarchies without displaying the shape icons

- Prerequisites:
  - Apply SAP Note 1300881 to BW
  - Add object BEX_SKIP_SYMBOLS with the value "X" to the RSADMIN table
  - Upgrade the 3.x BEx Analyzer to at least FEP 6
  - Set the Workbook Setting to Suppress the Hierarchy Icons (specific to each query in the workbook)
- Additional navigation options are available with FEP 7:
  - Context Menu or
  - Keyboard Shortcut
  - See SAP Note 1345468

See next chapter for more details.

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SAP BEx Analyzer 7.0 & Microsoft Excel 2007 Compatibility

Limitations

- Performance degradation in Workbook refresh due to changes in the Microsoft Office 2007 Shape Rendering Engine
  - Repair functionality introduced as of FEP 600 (see SAP Note 1160093)
  - Workaround has been introduced in FEP 801 (see SAP Note 1286653)
- Broadcasting of Microsoft Excel 2007 Workbooks is supported as of Precalc Server 801 (SAP Note 1259442)
- Microsoft Excel 2007 SP2 is not compatible with pre-FEP 900 releases of the 7.0 Analyzer (see SAP Note 1325527)

Recommendations

- Minimum of BI 7.0 Add-on FEP 801 is required
- Suggested to implement FEP 900 when a GUI upgrade is started – this will avoid issues later if SP2 is rolled out for Microsoft Excel 2007
- Apply latest FEP available for BI 7.0 Add-on
- Apply the KB Articles noted below

Microsoft KB Articles

956798 Aug 2008 Hot Fix for Microsoft Excel 2007

956634 Details on enabling the Aug Hot Fix

959640 Dec 2008 Hot Fix for Microsoft Excel 2007

961400 Details on enabling the Dec Hot Fix

968863 April 2009 Cumulative Update to correct issue related to Workbook Repair & Save issue (related SAP Note 1293255)

Important SAP Notes

1283936 Drag and Drop not working with Excel 2007 and local file

1286653 BEx Analyzer: Performance issues while displaying hierarchies

1289127 BEx Analyzer: performance issue applying styles in Excel 2007

1300407 Issue in printing WB while Analyzer is loaded in Excel 2007

1325527 BEx Analyzer crashes on opening workbook in Excel 2007

1345468 BExAnalyzer: context sensitive double click on hier. nodes

1411567 BExAnalyzer: Crash when saving protected XLSM workbook

1415608 VBAProject remains opened even after closing the workbook

1429695 Wrong WB extension created in TEMP directory with Excel 2007

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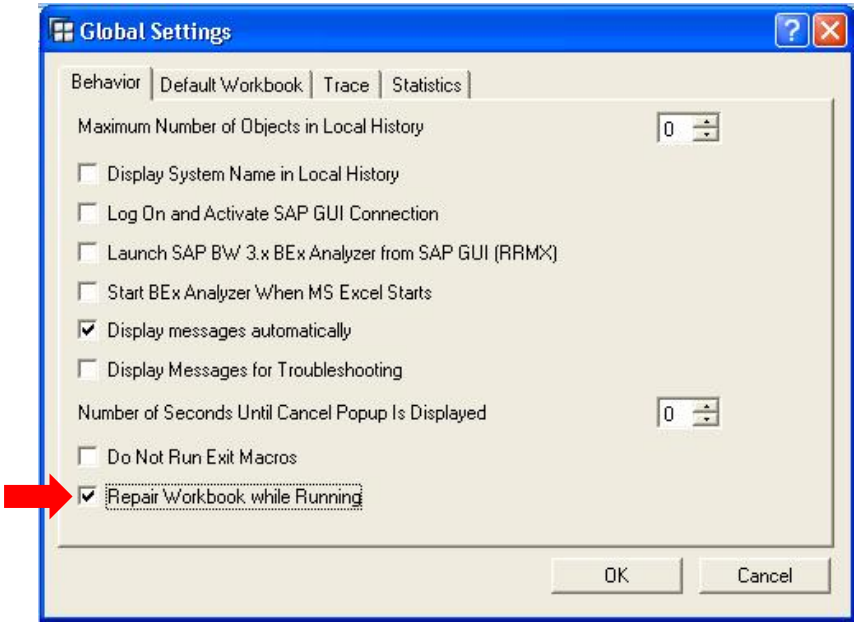
Repairing a Workbook

When refreshing a large workbook in the 7.0 Analyzer with Microsoft Excel 2007, you may experience very long refresh times

There may be a high number of name and shape objects which are unused. To correct this, you need to **repair the workbook**.

- Process:
  - Open Workbook Global Settings
  - Select 'Repair Workbook while Running'
  - Open Workbook, Refresh and Save to BW Server
- Refer to Note 1160093 & 1293255
- The Repair is a ONE TIME activity
- Only relevant for workbooks created prior to FEP 4 (7.0)



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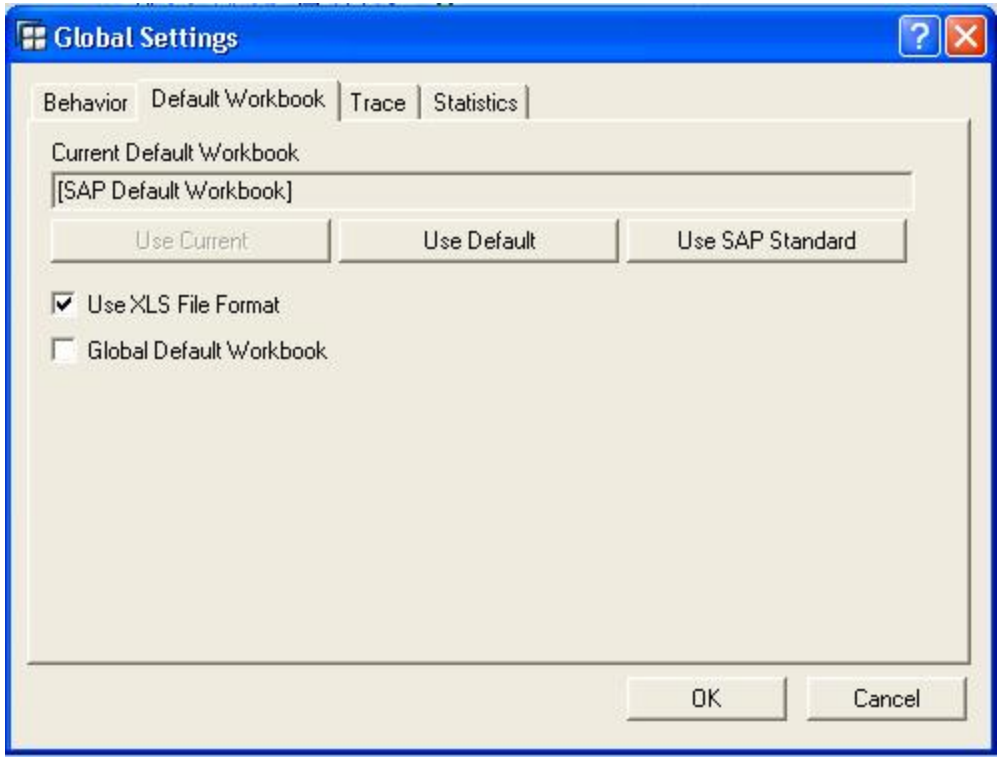
7.0 BEx Analyzer & Microsoft Excel 2007 – Using XLS Workbook as default in 7.0 Analyzer

- Previously, by default the 7.0 Analyzer would always open workbooks in XLSM format
- As of FEP 800, a new Workbook Setting is available to open workbooks in XLS format



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7.0 BEx Analyzer & Microsoft Excel 2007 – Optimized Storage Setting

- If a Workbook takes a very long time to open, the Optimized Storage setting will need to be enabled
  - Can be enabled as workbook specific setting 'Use Optimized Storage' or as a system-wide change by adding RS_FRONTEND_INIT setting 'ANA_USE_OPTIMIZE_STG = X'
- This setting allows for optimized storage of BI Metadata associated with the workbook and time to open the workbook
- This setting is only relevant for new Microsoft Excel 2007 File Formats (.xlsx, .xlsm, .xlsb)
- **This setting should only be implemented/used once ALL client installations are upgraded to FEP 800 or above!**
- See SAP Note 1260213 for full details

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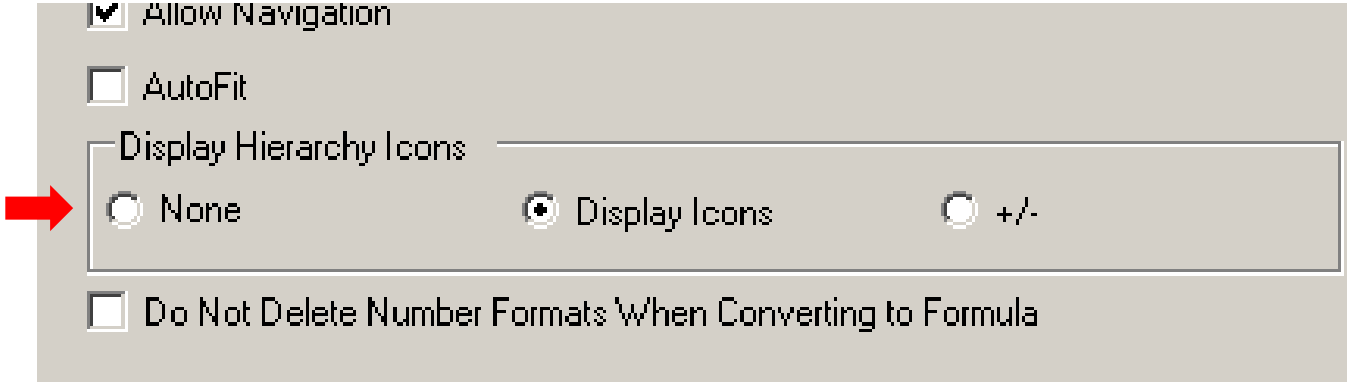
Navigating Hierarchies via Context Menu or Keyboard Shortcut (1)

- Due to performance issues in the Microsoft Office 2007 Shape Rendering Engine, SAP has introduced a workaround in FEP 801 to navigate hierarchies without displaying the shape icons

- To suppress the display of hierarchy icons in the Analysis Grid, select the workbook settings icon and then deselect the 'Display Hierarchy Icons' property of the Analysis Grid. This will improve overall performance of the Workbook since no shapes will be utilized in the Workbook to display the hierarchy icons.



- See SAP Note 1345523

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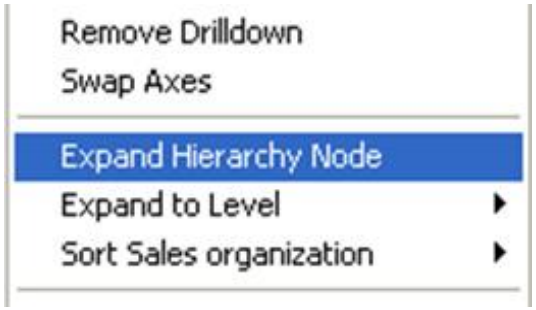
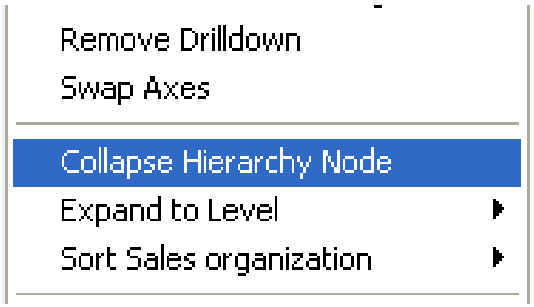
Navigating Hierarchies via Context Menu or Keyboard Shortcut (2)

- If you right click on a hierarchy node which is currently collapsed, there will be an option in the context menu ‘Expand Hierarchy Node’. Alternatively you can also expand a hierarchy node by keyboard shortcut Ctrl+Shift+"+".



- If you right click on a hierarchy node which is currently expanded, there will be an option in the context menu ‘Collapse Hierarchy Node’. Alternatively you can also collapse a hierarchy node by keyboard shortcut Ctrl+Shift+"-".



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Microsoft Excel 2007 Support Package 2

- Microsoft Excel 2007 SP2 causes workbooks to crash immediately after opening them (with pre-FEP 900 versions of BEx Analyzer)
- Therefore before implementing Microsoft Excel 2007 SP2, be sure to plan for an upgrade to at least FEP 900 at the same time!
- To correct the issue, implement at least FEP 900 and refer to SAP Note 1325527

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SAP BEx 7.0 & Microsoft Excel 2007 Compatibility

General Information & Limitations

- See SAP Note 1236773

Pre-requisites

- See SAP Note 1298788

Recommendations

- To use the Excel 2007 file formats (XLSM, XLSB, XLSX), you require at least patch level 801 and a backend correction
  - See SAP Notes 1259442 and 1276981
- Apply latest FEP available for BI 7.0 Add-on and latest patch available for BI 7.0 pre-calculation service
  - Current patch level 12 for SAP GUI 7.10 (released 2010-04-01) and 01 for SAP GUI 7.20 (released 2010-05-05)

Trouble-shooting

- See SDN: http://www.sdn.sap.com/irj/scn/index?rid=/library/uuid/30e3d697-4ca0-2c10-4b81-c474b1490064

Important SAP Notes

1259442 Precalc Server support for Excel 2007 file formats (Frontend)
1276981 Precalc Server support for Excel 2007 file formats (Backend)
1346466 PrecalcServer: precalculated workbooks are hidden
1453559 PrecalculationServer: cannot access file *.xla

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Wrap Up

Recommendations for customers utilizing SAP BEx with Microsoft Excel 2007:

- Upgrade to the **most recent** BW 3.5 or BI 7.0 Add-on Front-end Patch (FEP)
- Apply the relevant Microsoft KB Articles as documented in previous slides
- Include a proper test cycle to test workbooks with Microsoft Excel 2007 before going live
  - Focus on workbooks with larger volumes of data and hierarchies
- Consider utilizing the context-menu hierarchy navigation until Microsoft offers a more permanent fix for shape engine performance
- Plan accordingly for workbook repairs to be executed for large workbooks prior to go-live, or train end users on how to execute the repair

Please find most recent information on support packages and patches on
https://www.sdn.sap.com/irj/sdn/nw-bi?rid=/webcontent/uuid/50e35106-82d6-2a10-7c9f-f4183a04ebec

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