

Allstate Migration and Infrastructure for XI 3.1

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Topics

- ▶ Overview of SAP BusinessObjects at Allstate
- ▶ Planning for the Migration
- ▶ Design of XI 3.1 Cluster
- ▶ Migration
- ▶ Lessons Learned and Tips
- ▶ Q&A

Overview of SAP BusinessObjects at Allstate

▶ SAP BusinessObjects reporting environment at Allstate

- History:
 - Business Objects 5.1 (2000-2003)
 - Business Objects 6.5 (2003-2006)
 - Crystal Enterprise 10 (2005-2006)
 - Merged into Business Objects XIR2 (2006)
 - XIR2 FP2.3 (2006-2009)
 - XI 3.1 FP 1.9 today
 - XI 3.1 SP 2 FP 2.7 tomorrow
- Centralized COE supporting infrastructure, distributed app ownership and support
- ~ 150 different reporting projects, thousands of reports
- Over 20,000 users

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Overview of SAP BusinessObjects at Allstate

▶ How is SAP BusinessObjects used?

- Web Intelligence reports – Java based deployment (WebSphere)
- Crystal Reports - most with custom .Net front end applications
- Xcelsius dashboards – mostly for executives, number growing fast
- Desktop Intelligence reports – for some die hards
- Voyager reports against SAP BW and MS OLAP cubes
- Explorer (Polestar) information spaces

▶ Reporting data sources

- Oracle, SQL Server, DB2, SAP (both R/3 and BW)
- Microsoft OLAP cubes

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Topics

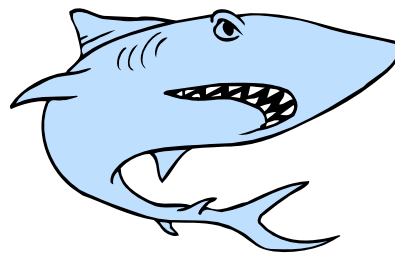
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Planning for the Migration

- ▶ **Why migrate?**
 - Swimming shark principle
 - Support for new products:
 - Win 2008 (...but – see later)
 - SQL Server 2008
 - MS Analysis Services 2008
 - Oracle 11G
 - .NET 3.x
 - IE 8 (SP2)
 - New functionality:
 - Voyager
 - Xcelsius improvements
 - QAAWS improvements
 - WEBI improvements
 - Crystal 2008/Xcelsius integration
 - Improved administration through CMC
 - Life Cycle Manager
 - EOSL servers



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Planning for the Migration

▶ General approach

- Big Bang not practical
- Build parallel 3.1 environments
 - Sandbox
 - Development
 - UAT/Stage
 - Production
- Move applications one at a time
- Each application support area responsible for testing of their applications

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Planning for the Migration

▶ Prep Phase:

- Finalize 3.1 architecture
- Place hardware orders
- Download software
- Setup sandbox environment
- Communicate with users and developers

▶ Phase 1:

- Build SMS packages for client tools
- Setup Development, UAT and Production environments
- Start new development on 3.1

▶ Phase 2:

- Application migration

▶ Phase 3:

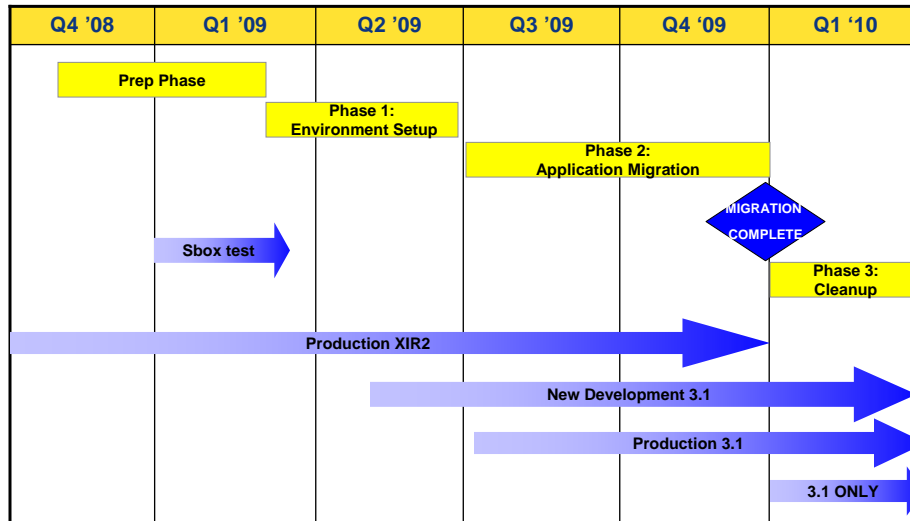
- Shutdown XIR2 environment
- Decommission EOSL servers and move remaining servers
- Cleanup

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Planning for the Migration

► General Timeline



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Design of XI 3.1 Cluster

- ▶ **Objective: blend of performance and fault tolerance**
- ▶ **Separation of tiers improves performance**
 - Servers located in two data centers
 - Processing tier servers installed close to data
- ▶ **Servers in pairs (or more) for load balancing and failover**
 - Single server failure should be barely noticeable
- ▶ **New features: nodes and server cloning**
 - Great for large distributed installations
 - Only needed servers deployed
 - Easy to readjust servers as needed
- ▶ **Remote processing servers used as a standby failover**
 - No backup servers sitting idly in a “hot site”

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Design of XI 3.1 Cluster

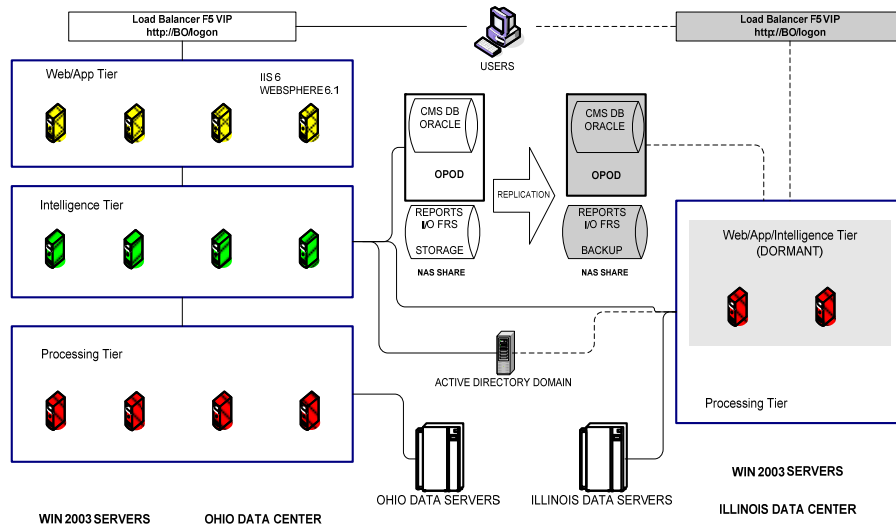
- ▶ **Distributed design for load balancing and failover – similar to XIR2**
 - Web/Application tier – four servers
 - WebSphere 6.1, IIS
 - Intelligence Tier – four servers
 - Central Management Servers
 - High availability Oracle data base on OPODS (Unix)
 - I/O File Repository Servers
 - FRS on Network Attached Storage (NAS)
 - Processing Tier – six servers to start
 - Four servers in Ohio Data Center
 - To be expanded to seven when XIR2 is gone
 - Two servers in Illinois Data Center
 - To be replaced by six in the new center
 - All new servers dual core blades
 - Easy to scale up – just add servers as needed to the appropriate tier

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Design of XI 3.1 Cluster

BusinessObjects Enterprise XI 3.1 production – starting point

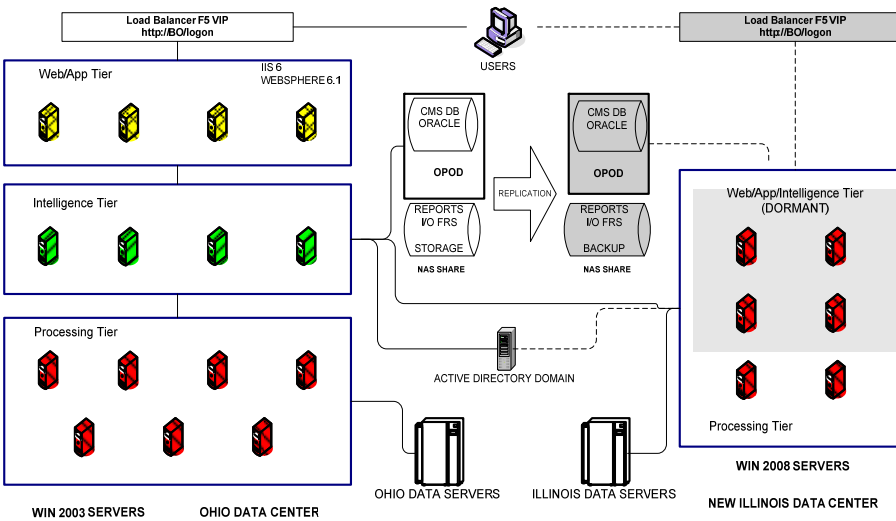


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Design of XI 3.1 Cluster

BusinessObjects Enterprise XI 3.1 production – target



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Design of XI 3.1 Cluster

▶ **The Caveat:**

- New data center accepts Win 2008 servers only
- Mixed OS environment (is it really supported?)
- Several restrictions (later)

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Topics

- ▶ **Overview of SAP BusinessObjects at Allstate**
- ▶ **Planning for the Migration**
- ▶ **Design of XI 3.1 Cluster**
- ▶ **Migration**
- ▶ **Lessons Learned and Tips**
- ▶ **Q&A**

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Migration – the Approach

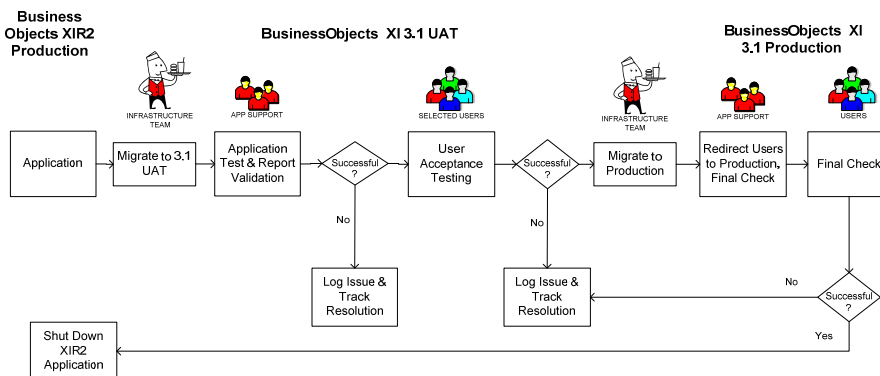
- ▶ **Migrate content from XIR2 production to 3.1 UAT**
 - One application at a time (1 app. = 1 public folder)
- ▶ **Test on UAT**
 - Application owners
 - Selected power users
- ▶ **Resolve issues, if any**
 - Re-migrate prod -> prod if no issues found
 - Migrate UAT -> prod if remediation needed
- ▶ **Run for two weeks in parallel**
 - Disable access to the XIR2 folder after two weeks

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Migration – the Picture

APPLICATION MIGRATION FLOWCHART
BUSINESS OBJECTS XIR2 TO XI 3.1



NOTES:

1. This flowchart covers static apps only, with no development in progress.
2. Personal folders will be migrated directly to production.
3. Custom web apps using BO SDK will be migrated by their support teams. BI Infrastructure will migrate just the BOE content.

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Migration – the Scope

▶ Content Migrated

- Users/Groups
- Universes and connections
- Public folders with security
- Standard reports (Crystal, WEBI, DESKI)
- Events
- Xcelsius dashboards
- Personal documents
- Schedules
- Historical instances
- Custom code (.NET apps) for application integration

▶ Content Not Migrated

- Inbox documents
- Preferences
- Calendars

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Migration – the Flows

▶ Flow A: WEBI/DESKI

- Round 1:
 - Users/groups
 - Public folder/subfolders with objects (reports)
 - Universes associated with reports
- Round 2:
 - Users/groups
 - Personal folders (favorites)
 - Instances (recurring, historical)

▶ Flow B: Crystal Reports

- Users/groups
- Public folder/subfolders with objects (reports)
- Instances (recurring, historical)

▶ Flow C: Xcelsius Dashboards

- Dashboards
- QAAWS (had to be republished)

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- ▶ **Lessons Learned and Tips**
- ▶ Q&A

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Lessons Learned and Tips

- ▶ **The obvious**
 - Invest time in strategy and planning
 - Clearly identify roles, responsibilities and processes
 - **If possible, have a team dedicated to the upgrade**
 - Meet regularly with migration team members
 - Log all issues in a central location
 - Ensure regular / thorough communication
 - Start with smaller projects to migrate
 - Plan for issues and delays
 - Keep the end users in mind to minimize the impact on their job

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Lessons Learned and Tips

- ▶ **Tip: Spend time to learn the technical environment**
 - Carefully review Platforms doc for compatibility with other software
 - Substantial change in the architecture
 - Single service on the server – Server Intelligence Agent (SIA)
 - Learn pronunciation [seeeya] to communicate with BO tech support
 - BO servers now fully controlled from CMC console
 - Sometimes still have to kill the process through task manager
 - Much improved CMC console
 - Ability to clone servers
 - Instance Manager included in CMC (but Query Builder hidden well)
 - New great feature – custom access levels

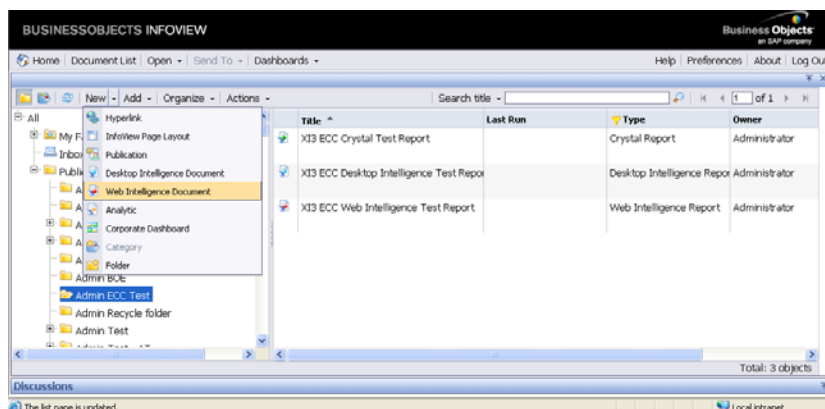


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Lessons Learned and Tips

- ▶ **Tip: Spend time to learn the new Infoview**
 - Demos, classes for the users
 - Job aids
 - Spread the gospel through key power users



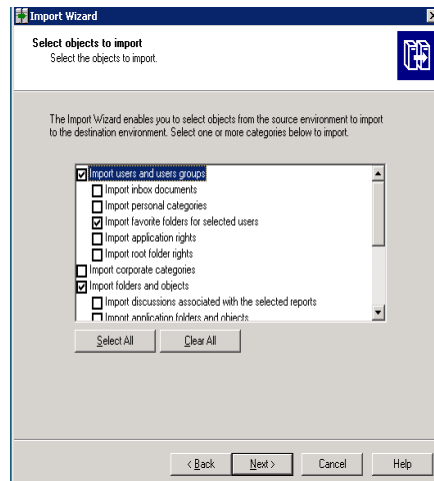
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Lessons Learned and Tips

► Tip: Spend time to develop and test the migration flow

- Test various combinations of Import Wizard options
 - Took us several iterations to come up with a good flow
- Don't attempt to migrate all groups at once – one bad group will spoil whole process
- Maintain good inventory of migrated projects (live content changes!)



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Lessons Learned and Tips

► Tip: Avoid Windows 2008 64 bit if possible

- Theoretically supported platform, but....
 - It's still a 32 bit software
 - Only 32 bit middleware (DB clients) supported
 - 32 bit DB2 client does not work on 64 bit Win 2008
 - 32 bit Oracle client messes up .NET assemblies
 - Requires 32 bit ODBC manager
 - Visual Studio 2005 conflict during installation
 - Crystal Reports installation hangs with certain options
 - Explorer (Polestar) not supported on 64 bit OS

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Lessons Learned and Tips

► Tip: Learn from someone else's mistakes

- Our biggest reasons for delays:
 - Resource allocation – no team dedicated solely to the upgrade
Production issues always take precedence
 - Several false starts with wrong migration flows
 - Too early? Perhaps should have waited for SP 2?
 - Bugs, bugs, bugs..... over 150 tickets
 - Applied FP 1.6, then 1.9 and 3 LA fixes
 - Test Fix Packs – they can break things
 - The weakest areas:
 - WEBI server
 - SAP Integration Kit



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The Bottom Line

► Things we like:

- WEBI improvements
 - Automatic timeout save
 - Better Excel download (single page, no more 65K limit)
 - Multiple browser windows
 - Query Summary
 - Optional prompts
 - Formatting icons
- Crystal new features
 - Sort button
 - Prompt panel
 - Xcelsius integration
- QAAWS and Xcelsius improvements
- Better CMC functionality



► Things we don't like:

- Slower Infview and CMC interface
- Many functions require more clicking
- Inconsistent interface design – right click for some functions, icons for others
- Some CMC functions much harder than in XIR2

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Q&A

▶ **Questions**

- Alex Timberg, Systems Consultant, Allstate Insurance Company
- I will repeat questions to ensure everyone can hear

▶ **Contact information**

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