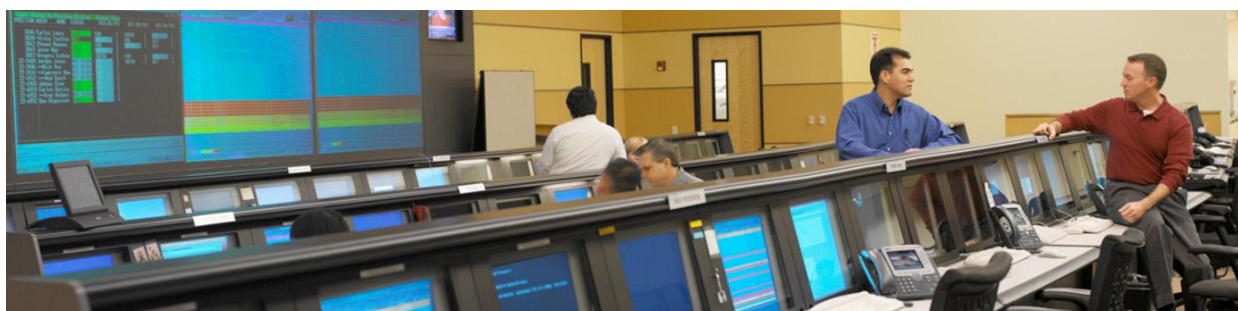


## Cisco Business Intelligence Appliance for SAP®

*SAP® BusinessObjects Explorer Accelerated on Cisco Unified Computing System*



### Leveraging the Power of In-Memory Analytics

Information is everywhere. But finding good information that can help your company, your career, or your bottom line can be difficult. And getting your hands on it quickly can be an even greater challenge. In parallel, your company's focus has been on streamlining operations, acquiring customers, increasing revenues and profitability, and outpacing the competition. And while your company has continued to improve its operating efficiencies, you feel your company should be spending more time analyzing what's going on and predicting and planning for the future – rather than having your employees constantly running around trying to solve operational problems based on history and putting out fires. That's why SAP and Cisco have joined forces to create a powerful, self-service Business Intelligence appliance designed to help you locate, evaluate, and use your crucial business information while minimizing the operational cost. The SAP® BusinessObjects Explorer Accelerated on Cisco Unified Computing System will change the way you deliver and access the vital data that is coursed through your enterprise.

### The Cisco Business Intelligence Appliance:

- Accelerate your time-to-insight, and use real-time access to data to inform decision-making at every level
- Compile and evaluate data captured by internal processes to streamline business operations, improve productivity, identify cost savings, and outflank your competition
- Use real-world data that comes directly from the trenches – from shipping, manufacturing, inventory, finance, and other departments– to foster growth, avoid risk, and reduce costs
- Create an in-memory consolidated data mart using the data integration and modeling capabilities, from almost any type of data source
- Get up and running with your jointly optimized and tested solution in weeks, not months – with a turnkey appliance with built in operational lifecycle automation

### SAP and Cisco – Ready, Set, Grow

Together, SAP and Cisco provide a 360-degree Business Intelligence solution that supports your growing enterprise. SAP BusinessObjects Explorer Accelerated is designed to deliver blazing performance and intuitive queries even as data volume, workgroups, and enterprises expand. And Cisco Unified Computing System (UCS) technical

architecture leads the industry in nearly every category – scalability, performance, power reduction, simplicity of design, and more. SAP and Cisco: a great partnership for you, for your growing enterprise, and for the future of Business Intelligence.

## Solutions for the Informed Enterprise

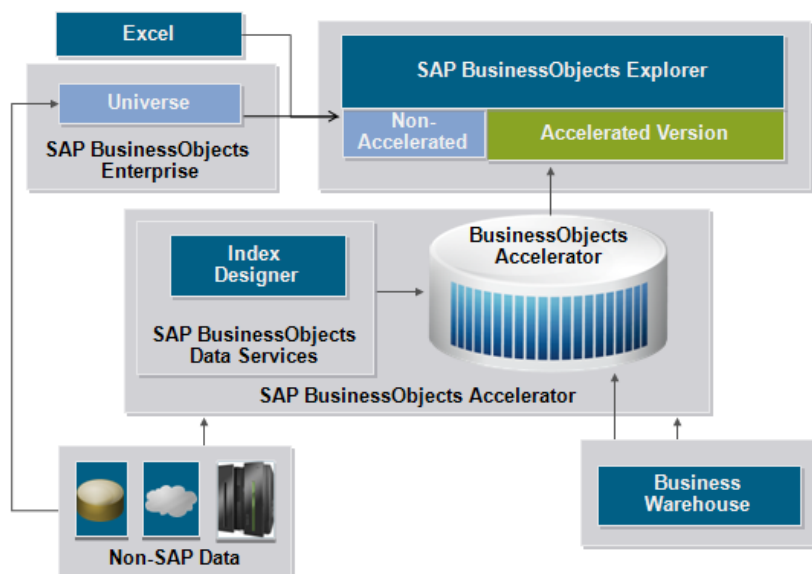
### The Need for a Comprehensive Real-Time Business Analytics Platform

It was identified in the Nov 8<sup>th</sup> 2010 edition of Information Week an article about Business Intelligence implementations; the importance of making sure your vendor has an answer for operational lifecycle support beyond services. While services are a critical component for helping to achieve a quick adoption and implementation, it is also important to have a platform which enables one to be self-sufficient. This is especially important given the strain on resources that IT and business organizations are undertaking due to economic challenges in the marketplace.

### SAP NetWeaver BW Accelerator & SAP BusinessObjects Explorer

SAP NetWeaver BW Accelerator( BWA) has been proven an innovative, fast, scalable and seamless solution that helps speeding up query performance significantly and enabling one to sort through volumes of information quickly while maintaining high levels of performance. With BWA one can now perform query processing up to 150 times faster than traditional approaches. Based on the accelerator's in-memory database, SAP also has SAP BusinessObjects Explorer, an intuitive front-end interface for search and exploration available to the SAP NetWeaver BW and non-BW community owners. This bundled solution called SAP BusinessObjects Explorer Accelerated provides an uncomplicated, self-service access to BI that enables users to easily perform complex analytics about data relationships and even uncover root cause analysis. The solution is delivered as an appliance for which the Cisco Unified Computing System provides unique advantages in the blade server marketplace. See Figure 1

**Figure 1.** SAP BusinessObjects Explorer Accelerator – Solution Components



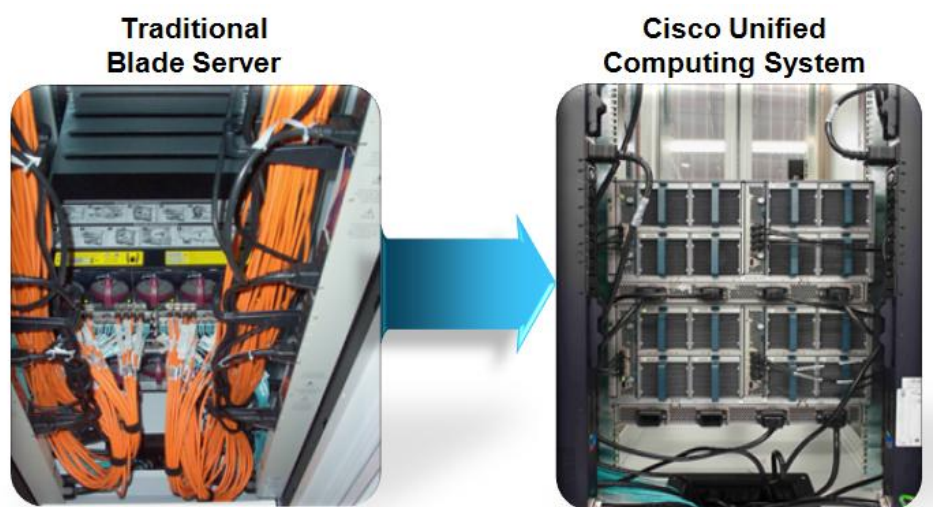
### Cisco Unified Computing System

The Cisco Unified Computing System is based on Cisco's unified approach to the data center that brings together compute, network and storage under a single management fabric. This creates the potential to lower systems management costs by allowing staff members to manage a larger number of devices by leveraging the ability to

dynamically provision physical and virtual IT assets. In addition, the Cisco Unified Computing System Manager has the ability to auto-discover any element of the system and assign that element to a particular set of service profiles. This approach makes it easier to see the dependencies between elements of the data center because it manages the whole system at a higher level of abstraction.

Fewer components in the system create a better eco-footprint in terms of both the amount of power consumed and carbon generated. Along, with a unique shared memory architecture developed with Intel, one now can actually increase application performance in a model that makes it the same effort to manage 8 blades as well as 320 blades. Another platform value add is the increased appliance performance through 10 GB connection between blades over Cisco UCS back plane, 10 GB north bound out of the appliance, and 10 GB to storage. This streamlined management capability lowers the total cost of ownership and helps organizations maintain aggressive Service Level Agreements (SLAs) across your BI landscape. See Figure 2

**Figure 2.** Cisco Unified Computing System (UCS) reduces complexity and risk

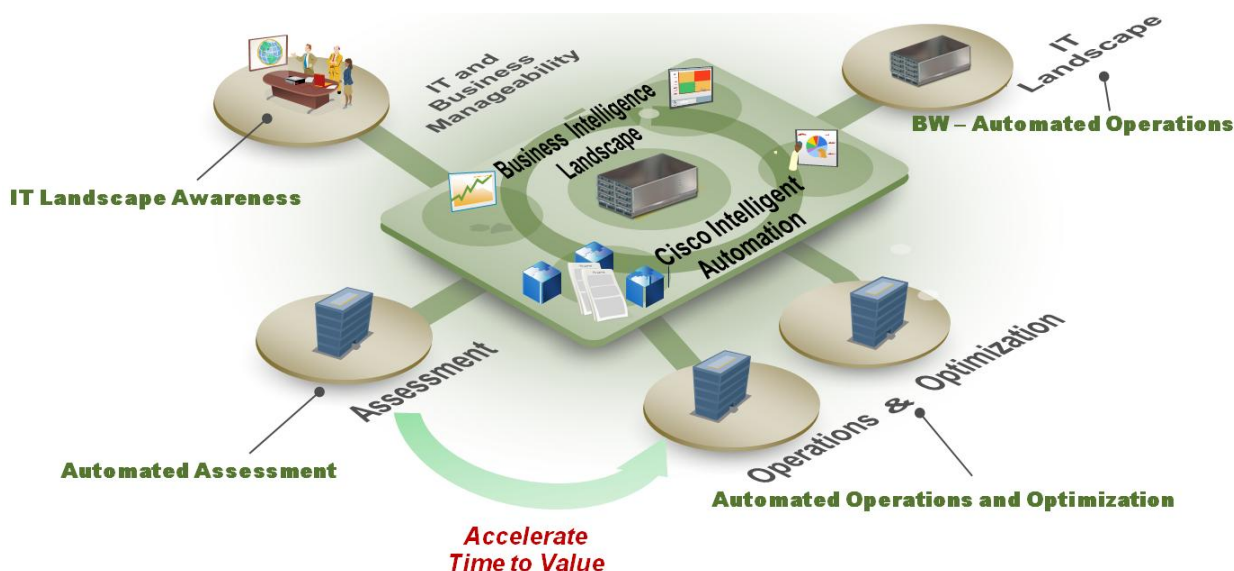


### **Cisco Tidal Intelligent Automation for Business Intelligence (BI)**

Business intelligence analysts have recently concluded that business analytics deployments are becoming more operational. For example, organizations now indicate that their business intelligence solutions cannot be down for more than a few hours without causing significant disruption to ongoing operations. This is a relatively new phenomenon on the heels of a long-time practice where BI was viewed as a standalone and often "nice-to-have" system that didn't have direct operational impact.

To address these requirements and shortcomings, organizations are increasingly beginning to look for alternatives to traditional business analytics platforms that streamline the technical operations and support. As a result, Cisco has introduced a unique value add to the BI appliance solution by bundling a turnkey automation component from Cisco that comes with pre-configured content for orchestrating tasks around BWA sizing, planning, tracking, forecasting, corrective actions for alerts and optimization. See Figure 3.

**Figure 3.** Cisco Business Intelligence Appliance with Cisco Tidal Intelligent Automation for BI workflows



The Cisco Tidal Intelligent Automation for BI provides automated pulse checks, data integrity checks, index reorganization, info package error analysis, services statistics monitoring, and many other out-of-the box process flows. Furthermore, the automation solution integrates with Cisco hardware, thus providing automated provisioning to proactively prevent services level interruptions to spin up a hot spare saving valuable time and reducing business impact in case of failure. This BI automation solution now helps to assure that your BW Accelerator deployment is maintained to continue to provide high ROI and BVA, or Business Value Attainment throughout the entire BI operational lifecycle.

### Automation is Key for Maintaining Operational Excellence

With automation one can reduce manual errors during performing tasks, increase quality of the end result and perform the tasks faster. With the combined solution of Cisco UCS and Cisco Tidal Intelligent Automation for BI, downtime is now minimized and a more comprehensive Total Cost of Ownership (TCO) is achieved. Figures 4 and 5 show examples of runtime delivered content from the Cisco BI automation solution within the appliance. While there is pre-packaged content for automating best practice procedures for the assessment, migration and optimization routines within the BI lifecycle; there is also an optional content component for automating best practices for your entire SAP application and in many cases infrastructure landscape as well. This ensures that your information architecture is solid and maintained for optimal data delivery to SAP BWA and Explorer Accelerated components.

Figure 4. Executing workflow checking query performance in relation to blade performance

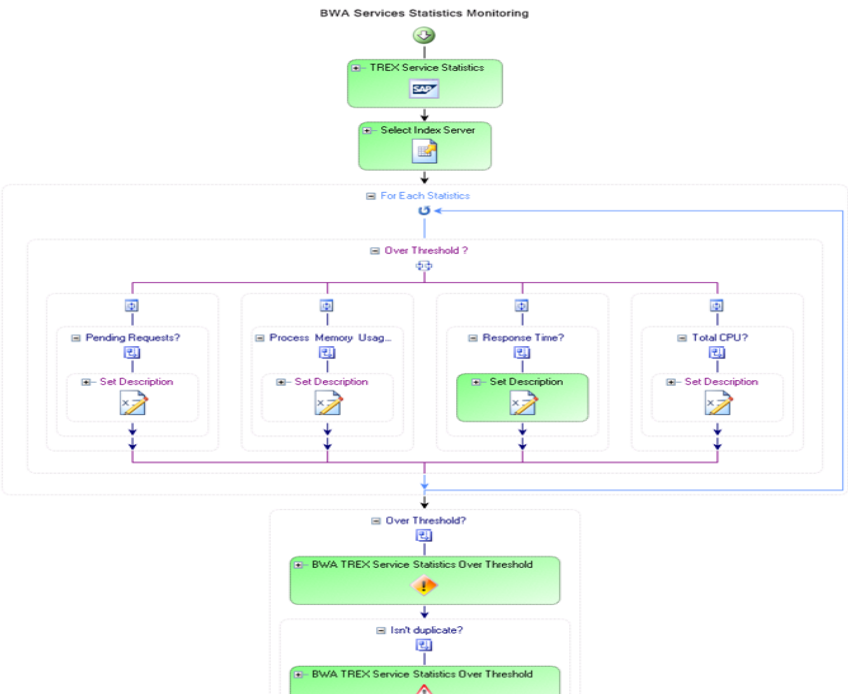


Figure 5. Automation summary of the query to blade analysis with recommended corrective actions

**Possible Cause**  
Slow response from network or frontend/calculation layer is the most likely cause of slow BWA indexed query response times.

**BWA Query Over Threshold**

**Test Result**  
BWA Query Over Threshold  
Target: db6 ABAP Connection

The following BWA queries are over the response time threshold:

OPP\_C03/OPP\_C03\_Q013, response time: 0.032.  
OPY\_C02/OPY\_C02\_Q002, response time: 0.032.  
OSD\_C03/PM\_OSD\_C03\_Q004, response time: 0.

Task URL: <http://SJC-DEV-DMS1:2081/TEOWebConsole/Task.aspx?id=c545b7ab-5d82-4c95-8839-ca022dfca7d8&server=SJC-DEV-DMS1>

**Summary**  
TEO detected BWA queries over the response time threshold.

**Possible Cause**  
High network or frontend/calculation is the most likely cause of slow indexed query response time. Other possible problems could be related to the accelerator infrastructure. Check for corresponding TREX service or index errors and alerts.

**Context Analysis**

**BWA Blade TREX Services Snapshot** Friday, December 03, 2010 8:16:46 AM

**Test Result**  
BW - TREX - Service Statistics (RFC Destination: 'TREX\_D6A', Show History: 'No')  
Target: db6 ABAP Connection

Location	Total CPU	Process CPU	Process Memory	Process Memory Usage %	Total Memory	Start Time	Threads	Handles	Active Requests	Finished Requests	Pending Requests	Response Time	Requests per Second	Service Name
suse-202-101:30101	11	0	589	0	645280		0	0	0	158	0	1838	12	Name Server
suse-202-101:30103	11	0	658	0	645280		0	0	0	104	0	1641	29	Index Server
suse-202-101:30107	11	0	551	0	645280		0	0	0	53	0	4	18	RFC Server
suse-202-102:30101	0	0	568	0	591400		0	0	0	66	0	57	17	Name Server
suse-202-102:30103	0	0	597	0	591400		0	0	0	94	0	2475	61	Index Server
suse-202-102:30107	0	0	542	0	591400		0	0	0	12	0	0	20	RFC Server
suse-202-103:30101	0	0	356	0	547244		0	0	0	38	0	41	28	Name Server
suse-202-103:30103	0	0	606	0	547244		0	0	0	61	0	1983	34	Index Server
suse-202-103:30107	0	0	504	0	547244		0	0	0	1	0	0	20	RFC Server

Fastest Path to Insight

SAP BusinessObjects Explorer Accelerated on Cisco UCS with automation is a prepackaged, integrated, and optimized solution designed for companies that need to provide service immediately to stakeholders for turbo-charged insights and decision support. Cisco offers these standard packages as shown in Figure 6.

**Figure 6.** Cisco BI Appliance Solution Offerings

Solution	Small Entry	Mid-size Entry	Enterprise L
Server	CBI-S1 4 blade server Intel processor each with 12GB/24/48GB main memory	CBI-M1 8 blade server Intel processor each with 24GB/48GB main memory	CBI-EL 8 blade server Intel processor each with 48GB main memory – scalable by adding new blades
External Storage	NetApp FAS Series	NetApp FAS Series	NetApp FAS Series
Service Lifecycle Stages With Intelligent Automation	1 – PLANNING (ASSESSMENT, SIZING AND REQUIREMENTS) 2 – INSTALLATION (Rack & Stack) 3 – CONFIGURATION (BO Explorer & BWA) 4 – CREATE REPORTS AND EXPLORER SPACES FOR END-USERS 5 – KNOWLEDGE TRANSFER		
Service Options	Upgrade service to SAP Netweaver BW 7.X and Business Warehouse Accelerator upgrade		

### Cisco BI Service Lifecycle with Intelligent Automation

Cisco can leverage your existing SAP Business Objects partner to deliver end-to-end lifecycle services across your BI landscape. In addition, Cisco offers the Cisco Tidal Intelligent Automation platform, which has pre-configured best practices to assist in the automation of certain service functions like identifying and indexing 5 BW queries, executing and performing corrective actions for failed ETL jobs. This enables organizations to quickly install, realize and deliver the value of the SAP BWA and Explorer solution faster to their stakeholders.

In addition, Cisco offers maintenance and support for the infrastructure solution during operation, and by leveraging the automation component of the solution, one can be more proactive rather than reactive during the troubleshooting process.

### A Unified Environment

This unified solution puts your enterprise knowledge-base within reach. Its intuitive, visual interface and fast query responses make it easy to explore and analyze a mountain of data. Users in all corners of the enterprise work in a consistent, familiar data-mining environment that helps them locate information and get answers on the fly. They spend their time working with data rather than wondering where to find it.



## Great Performance and Easy Operation

SAP BusinessObjects Explorer Accelerated on Cisco UCS with automation combines advanced technology from SAP and Cisco to ensure easy operation, fast response times under heavy data loads and great scalability.

### Features include:

- SAP software is pre-installed on the system and system setup and operation is streamlined through Cisco's UCS management framework which blends compute, network and storage resources into a single managed entity
- System performance is enhanced by industry leading processor technology and memory capacity up to 384 GB per blade. This is four times more than other comparable blade systems
- Scalability is ensured by the ability to manage up to 320 server blades in a single system

## Scalable, Cost-Effective Design

SAP BusinessObjects Explorer Accelerated on Cisco UCS with automation embraces change. It's a sustainable approach to Business Intelligence, designed to save money and improve efficiency at every turn:

- Unified hardware architecture uses up to 30% fewer components, switches, cabling, and modules, reducing your cost to purchase, manage, power, and cool
- Intuitive management tools are built in, allowing fast changes with fewer problems, and improving administrator efficiency by up to 90%
- Scalable, modular architecture protects your investment for years to come, and ensures that system performance aligns with the needs of your business

## For More Information

Cisco SAP BI Competency Center, email: [sapbi@cisco.com](mailto:sapbi@cisco.com)

To learn more about Cisco products and services, please visit <http://www.cisco.com>.



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