4 keys to making the most of IBM Control Center

Best practices to drive value across your B2B and MFT environment

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Highlights

- IBM Control Center: Beyond the basics

- Build value with the rules and events engine

- Gain visibility with workspaces and reporting

- Empower new users with data and functionality

- Integrate and automate with the interactive API console

IBM Control Center: Beyond the basics

Business-to-business (B2B) and application-to-application (A2A) integration is a key differentiator for sustainable success across your supply chain and internal business processes. With increasing volatility, complexity, trading partners and end-customer demands, a robust and flexible B2B environment has emerged as a prerequisite to doing business in our global and highly digitized world.

IBM® Control Center supplies critical monitoring and configuration management capabilities across your B2B and managed file transfer (MFT) systems to strengthen B2B governance and compliance, improve speed and precision, and enhance customer satisfaction. IBM Control Center delivers actionable insights to more effectively manage file transfers and key business processes, helping you reduce risk and better collaborate with trading partners and application teams.

With a simple approach, you can install IBM Control Center, connect to end points, and be quickly collecting data in a centralized, normalized database for audits, reporting and real-time monitoring of your B2B and file transfer environment. Yet robust capabilities in IBM Control Center make it possible to do far more than collect statistics and watch node status.

In this white paper, you'll find a selection of considerations and best practices to make the most of your IBM Control Center (formerly called IBM Sterling Control Center) implementation. Several high-level principles to keep in mind include:

Master fundamental building blocks

Take the time to understand reusable building blocks in IBM Control Center, such as rules, service level criteria (SLCs), calendars, schedules and user permissions. A sound grasp of key capabilities will help you map out how you apply these building blocks.

Start with simplicity

An incremental approach that builds on the basics and progresses towards deeper capabilities will pay dividends. Bite-sized modifications to your environment allow more effective change management, and make it simpler to spot issues that might emerge compared to unloading a host of changes all at once.

Utilize the Knowledge Center

The IBM Knowledge Center supplies detailed guidance and how-to tips on IBM Control Center. In addition, it's advisable to have personnel trained in the use of the IBM Cognos Business Intelligence (BI) solution included with Control Center to take full advantage of analytics and reporting.

Build value with the rules and events engine

Rules and SLCs, the building blocks of IBM Control Center monitoring, give you flexibility in helping to ensure flawless MFT exchanges and seamless processes in your B2B partner network. Taking full advantage of these capabilities is vital to realizing maximum value from your Control Center implementation. It's critical to recognize the different purposes that rules and SLCs serve:

- Rules monitor only events that occur
- SLCs monitor both events that occur or do not occur

SLCs are a key industry differentiator for IBM Control Center that let you identify and address "non-event" issues. For instance, you can configure an SLC to alert you if you didn't receive a file from a customer at an expected time, or a process exceeded a service level agreement (SLA) threshold. In many instances, SLC-driven non-event alerts are extremely valuable in ensuring seamless B2B transactions and avoiding costly interruptions, or penalties.

Though SLCs can also monitor events, it's usually a best practice to use rules for event monitoring because rules are simpler and more straightforward than SLCs. Learn more about rules and SLCs.

Workload type	SLC	Rule
Server up/down		X
Adapter up/down		X
Process or step failed		X
Process did not run	X	
Process ran on time	X	
File transfer took too long	X	
Process was not followed by another	X	

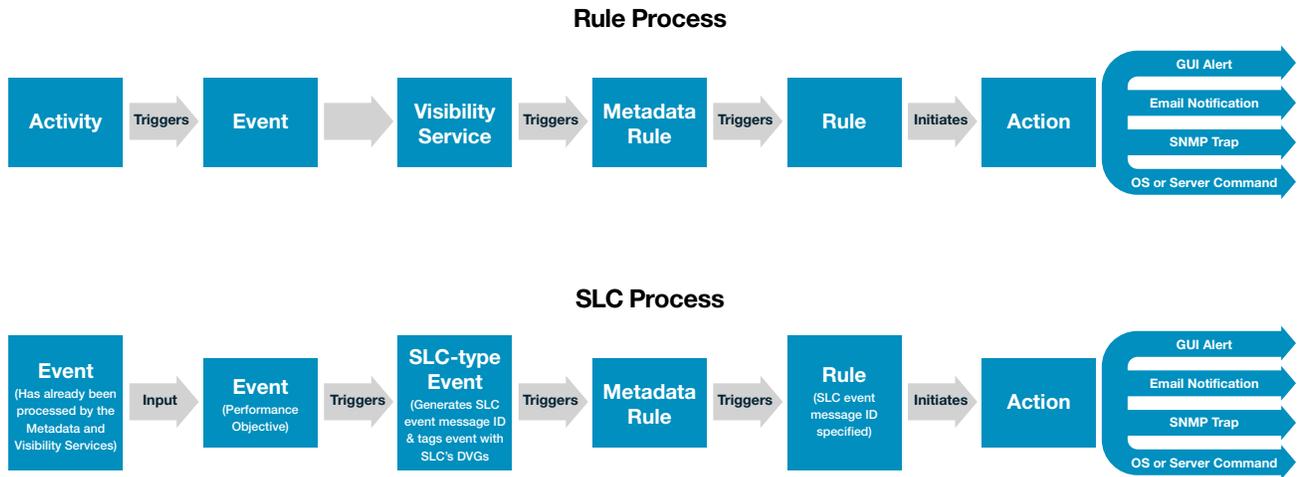*Figure 1*: Sample situations for applying rules or SLCs in IBM Control Center.

Rule Process

Activity	Triggers	Event		Visibility Service	Triggers	Metadata Rule	Triggers	Rule	Initiates	Action	

- GUI Alert
- Email Notification
- SNMP Trap
- OS or Server Command

SLC Process

Event (Has already been processed by the Metadata and Visibility Services) — Input — **Event** (Performance Objective) — Triggers — **SLC-type Event** (Generates SLC event message ID & tags event with SLC's DVGs) — Triggers — **Metadata Rule** — Triggers — **Rule** (SLC event message ID specified) — Initiates — **Action**

- GUI Alert
- Email Notification
- SNMP Trap
- OS or Server Command

Figure 2: Monitoring process flows differ between rules and SLCs.

IBM Control Center is capable of monitoring more than 22,000 potential events and non-events in a B2B/MFT environment. Monitoring all those potentialities, however, is counterproductive. Identifying what to monitor, and leaving out what is not important to you, lays the foundation for an effective IBM Control Center platform implementation.

In configuring rules and SLCs, a good starting point is to identify those processes that are most critical to your business. For instance, you may exchange a million files a week, but 10 of those files account for 30 percent of revenue. Configuring rules or SLCs to monitor every aspect of process integrity for those files is clearly a priority.

Once you've identified critical processes, you can use the Monitor This capability in Control Center to quickly create a rule or SLC for a process or file transfer. Reviewing the message IDs of events produced by the managed servers and transfers or processes in your environment is another valuable starting point in configuring your Control Center monitoring framework. Learn more about reviewing message IDs.
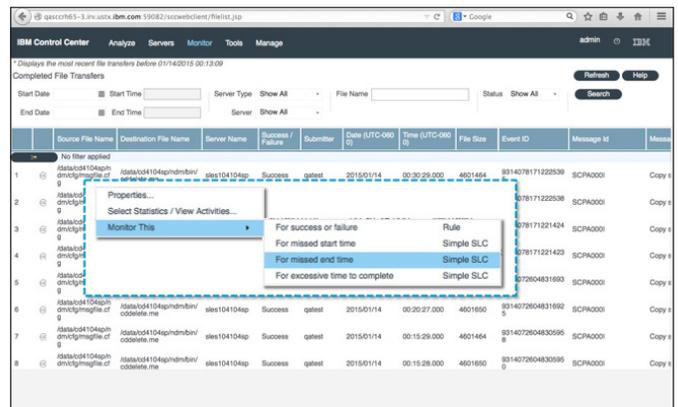

Figure 3: The Monitor This feature in Control Center makes it easy to quickly create a rule or SLC.

Gain visibility with workspaces and reporting

IBM Control Center gives you insights into key metrics through group and personal workspaces, and ad hoc reporting and analytics through the built-in IBM Cognos BI Server. Visibility into your B2B environment equips you to track error trends, identify areas for improvement, assess file sizes and volumes, and demonstrates value to the organization.

IBM Control Center supplies approximately 50 prebuilt reports. These are available through a simplified, embedded interface in Control Center itself, so as a starting point it's a good idea for users to familiarize themselves with out-of-the-box capabilities. Learn more about standard reports included with Control Center.

Data may also be accessed through group workspaces, accessible based on user role and managed by an administrator, or through personal workspaces, which may be customized by individual users. Some widgets for workspaces available out of the box include:

- *Volume of files over time.* Displays the volume of file transfers over time for specific servers that you have permission to view. You can filter which servers to view and select a specific time range.
- *Size of files over time.* Displays the size of file transfers over time for specific servers that you have permission to view. You can filter which servers to view and select a specific time range.
- *Active alerts by category.* Provides a graphical representation of active alerts that can be filtered by server type and category.
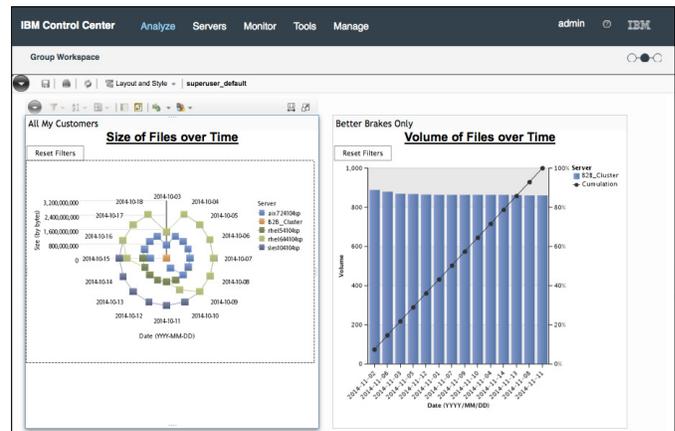

Figure 4: Out-of-the-box widgets track such metrics as size and volume of files over time.

In addition to what is available out of the box, users can define custom reports and widgets through IBM Cognos BI Server capabilities embedded in Control Center. Training or experience with the Cognos BI solution is recommended for effective report customization that addresses your objectives.

Empower new users with data and functionality

IBM Control Center has traditionally been used by IT administrators knowledgeable in the back-end infrastructure that supports B2B and MFT exchanges. Recent improvements to the solution have made it more accessible to users in business operations and global risk and compliance (GRC). For instance, a revamped web console is both easier to deploy and more intuitive and user-friendly for non-technical users.

Extending IBM Control Center to business users will give them greater hands-on monitoring and insights into your B2B/MFT network and heighten business/IT collaboration. Defining user access, configuring their roles and establishing permissions is an essential step for administrators to broaden the Control Center user base to include business stakeholders.

IBM Control Center hooks into your LDAP or Active Directory server (through Sterling External Authentication Server, or SEAS) to govern user credentials and support general role-based access and permissions. Typically, access will be established on the basis of need and security — a business user may benefit from monitoring and alerting of operations, but will have no need or authority to view or revise rules. To simplify management, Control Center lets you define groups of users, the servers they may access, and the functions those users can perform.

A capability called Data Visibility Groups (DVGs) lets you establish more granular data permissions for users. Whereas server groups let you define what data a user can see based on what server processed it, DVGs let you configure more granular permissions for what data or events a user can see on a given server. For instance, rather than allowing someone to see all transfers or processes on a server, you can restrict them to only see accounting data.
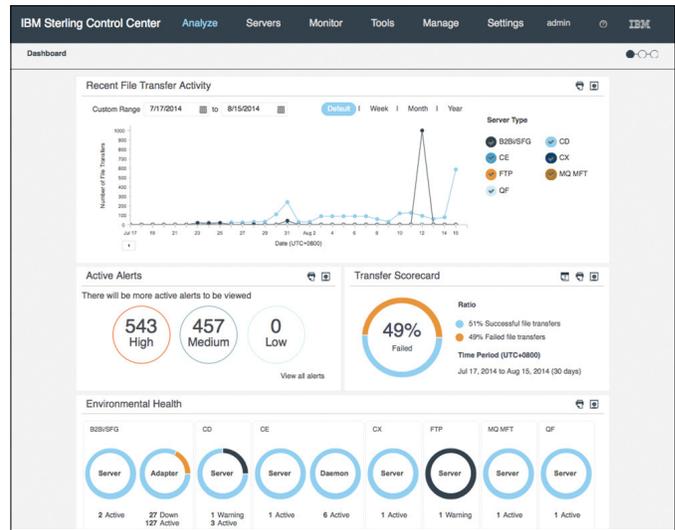

Figure 5. User views can be restricted by roles to display only data from specific servers, server groups or DVGs.

DVGs, however, can affect performance in environments with a high volume of events and should be used judiciously. Restricting access based on a server or server groups is advisable, if more granular restrictions are not needed. Learn more about user access, roles and permissions.

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Integrate and automate with the interactive API console

IBM Control Center supports integration and automation objectives through delivery of APIs and other user exits. For example, a rule can trigger action that includes sending out an SNMP trap to another system such as a ticketing system, or running an external program or script. Control Center also provides many APIs that cover functions such as configuring Control Center rules/SLCs and related objects, doing configuration for IBM Sterling Connect: Direct (through Control Center), retrieving alerts, querying completed transactions, and reviewing and managing alerts.

In the latest Control Center release, 6.0, IBM has exposed 10 times more REST APIs, which provide create, retrieve, update and delete functions for actions, calendars, email lists, rules, schedules and simple SLCs. For example, let's say you need a procedure for doing an unplanned server restart. If you take a server down, Control Center will notify you about it, which you don't want. Instead, you can build into that procedure a call to the Control Center API to disable the preconfigured rule so that you don't receive a large number of false error messages. Then, you can use the API again to turn on the rule when the server is brought up.

The RESTful APIs are supported with an interactive console for administrators and developers to conduct code development, test and integration. This interactive console provides a UI interface to identify the API and its options, as well as to build and test sample code. Learn more about REST APIs and the interactive console.
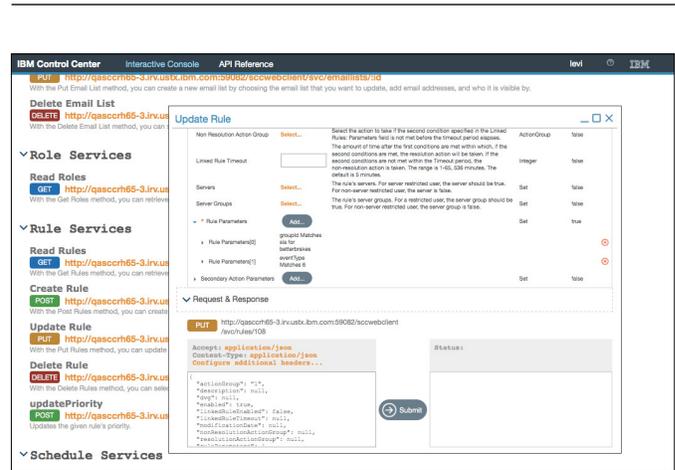

Figure 6: The interactive console in Control Center supports code development, test and integration.

Make the most of your Control Center investment

Organizations make significant investments in building out B2B/MFT networks for greater supply chain efficiency, reliability, compliance and risk mitigation. These investments, however, should not be a set-it-and-forget-it proposition. Exploring the rich capabilities in IBM Control Center equips you to realize greater value from your investment and extend that value to new audiences.

Initiatives that engage both IT and business stakeholders in building out your Control Center utilization can help you fine-tune your configuration for greater control, improve reporting and insights, empower new users, and automate and integrate across your enterprise applications. By moving beyond the basics in IBM Control Center, you can continually optimize the solution to take advantage of new opportunities and address challenges as they emerge.

For more information

To learn more about this offering, contact your IBM sales representative or visit the following web site:
ibm.com/software/products/en/control-center