

Original Article

ServiceNow eBonding Methods, Implementation and Key features

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Received: 12 October 2024

Revised: 13 November 2024

Accepted: 26 November 2024

Published: 30 November 2024

Abstract - ServiceNow eBonding is a tool that connects ServiceNow with other systems or external partners to automatically exchange information and manage workflows between them. It helps different organizations, like vendors or service providers, work together more smoothly by automatically creating and updating tasks, incidents, or service requests in real-time. This reduces the need for manual data entry and helps prevent errors, speeding up the resolution of issues and improving overall service delivery. eBonding is particularly useful when multiple companies or teams are involved in providing a service, ensuring better communication, transparency, and efficiency. By automating these processes, ServiceNow eBonding helps organizations save time, meet Service Level Agreements (SLAs), and enhance collaboration across various platforms.

Keywords - ServiceNow eBonding, Integration, Automation, Workflows, External partners, Service delivery, Collaboration.

1. Introduction

In today's fast-paced business world, companies rely on multiple systems and tools to manage different aspects of their operations. Each tool may work well individually, but the real challenge arises when these systems must communicate and collaborate. Seamless communication is essential, whether it is sharing data between IT systems, managing vendor relationships, or syncing information across departments. This is where ServiceNow eBonding comes in. In simple terms, eBonding is about connecting ServiceNow to other systems—like IT service management (ITSM) tools, vendor platforms, or monitoring systems—so they can exchange information automatically. Instead of manually entering data or duplicating efforts across systems, eBonding ensures that these platforms can share data in real time. This makes operations more efficient and fosters better collaboration between teams. For ServiceNow, eBonding connects its platform to external systems using standard integration methods such as web services or APIs (Application Programming Interfaces). Once linked, ServiceNow can automatically send data—like incidents, service requests, or updates—across systems without human intervention. This reduces errors, speeds up responses, and keeps everything running smoothly.

2. Research Motivation

This research is motivated by the need to understand how ServiceNow eBonding can improve how different

systems work together. In today's business world, companies use many different platforms for managing services, and ensuring they can communicate smoothly and share data in real-time is key to running efficiently. This study will look at how eBonding can automate tasks, reduce the need for Manual work and improve collaboration between teams both inside and outside the organization. Using APIs and web services, eBonding helps resolve issues faster, deliver better service, and strengthen vendor relationships while keeping data accurate and secure across all systems.

3. Methods Used in eBonding

3.1. RESTful APIs

- **What They Are:** REST APIs are commonly used in ServiceNow eBonding to enable communication between ServiceNow and external systems. They are lightweight, fast, and easy to use, making them great for real-time syncing data.
- **How They Work:** When an incident, request, or other record is created or updated in an external system, a REST API call is made to ServiceNow to create or update the corresponding record. Similarly, ServiceNow can send data back to the external system via a REST API.
- **Examples**
 - **Incident Creation:** A third-party IT service management (ITSM) tool might make a REST API



call to ServiceNow to create a matching incident record in ServiceNow.

- *Status Update:* When an incident is resolved, ServiceNow can send a REST API request to update the incident status in the external system.

- **Key Benefits**

- Simple to use and scale.
- Supports different data formats like JSON and XML.
- Easily integrates with both cloud-based and on-premise systems.

3.2. SOAP Web Services

- **What They Are:** SOAP (Simple Object Access Protocol) is another method used in eBonding, particularly for integrations with older (legacy) systems or when stricter security and reliability are required. SOAP is more formal and robust than REST and is often used when the transaction needs are more complex.

- **How They Work:** SOAP web services in ServiceNow expose specific operations (like create, read, update, delete) that external systems can use to interact with ServiceNow records. For example, if a new incident is logged in an external system, a SOAP call can create the same incident in ServiceNow.

- **Examples**

- External systems might use SOAP to create incidents, retrieve information, or update records in ServiceNow.
- SOAP is often required for integrations with legacy systems that adhere to traditional web service standards.

- **Key Benefits**

- Strong support for security and transactional reliability (e.g., WS-Security).
- Can handle advanced messaging patterns, such as asynchronous messaging.
- Perfect for integrations with enterprise-level systems.

4. Steps Involved in the Implementation of eBonding

Several technical and functional requirements must be met to enable ServiceNow eBonding, which integrates ServiceNow with external systems (such as third-party tools or other ServiceNow instances) for seamless data exchange. These requirements typically include:

4.1. ServiceNow Instance Configuration

- **ServiceNow Subscription:** Ensure you have an active ServiceNow instance with access to the necessary modules (e.g., ITSM, ITOM, or IntegrationHub), depending on your integration use case.

- **Version Compatibility:** eBonding is supported in specific versions of ServiceNow. Verify that your instance is on a supported release (e.g., Orlando, Paris, or later).
- **Administrator Access:** You must have administrative access to configure and manage integration points and API credentials.

4.2. Integration Hub / eBonding Plugin

- **IntegrationHub:** ServiceNow IntegrationHub provides pre-built connectors and flow logic to simplify eBonding. Ensure that you have the correct license for this tool.
- **eBonding Plugin:** The eBonding plugin should be installed on your instance. This plugin comes with pre-built connectors, flow templates, and integration capabilities.
- **Activate eBonding Plugin:** Sometimes, you may need to request ServiceNow support or enable the eBonding plugin manually through the ServiceNow Store or system settings.

4.3. APIs and Web Services

- **RESTful APIs:** The external system must support REST APIs for communication. ServiceNow eBonding typically uses REST API calls to exchange data.
- **SOAP APIs (if needed):** If you integrate with legacy systems, SOAP-based web services might be required.
- **Authentication Mechanisms:** The external system and ServiceNow should support appropriate authentication methods like OAuth, Basic Authentication, or API keys.

4.4. Data Structure Alignment

- **Field Mapping:** Define field mappings between the systems. This involves aligning data between ServiceNow and the external systems for consistent record sharing (e.g., incidents, changes, or requests).
- **Data Transformations:** Data may need to be transformed between formats (JSON, XML) or value types (e.g., translating statuses between systems).
- **Schema Design:** Both systems should have an aligned schema or data structure, or you may need to create transformations to reconcile differences.

4.5. Security and Permissions

- **Role-based Access Control (RBAC):** Ensure that users or systems involved in the eBonding process have the appropriate roles and permissions. This may include setting up integration-specific roles or ensuring that external users have valid roles in ServiceNow.
- **Encryption:** Secure data transfer is critical, so ensure that all communication (TLS/SSL) between ServiceNow and external systems is encrypted (TLS/SSL).

4.6. External System Configuration

- **API Access:** The external system (e.g., another ServiceNow instance or third-party system) must expose the necessary API endpoints for the data exchange.

- *Authentication for External System:* Proper credentials or OAuth tokens for authentication between ServiceNow and the external system.
- *Endpoint Configuration:* External systems should be configured to accept incoming connections from ServiceNow. This may require setting up API endpoints, webhooks, or specific integration services.

4.7. Integration Flows

- *Flow Designer:* In ServiceNow, Flow Designer is used to design, automate, and manage integration workflows. It would help if you defined integration flows that automate sending and receiving data between systems.
- *Pre-built Flow Templates:* ServiceNow provides pre-configured eBonding flow templates for common use cases such as incident management, change management, or problem resolution.
- *Error Handling:* To ensure reliability, define workflows for error handling, logging, and retry mechanisms.

4.8. Data Synchronization and Updates

- *Real-time Data Exchange:* Decide whether data needs to be synchronized in real-time or scheduled. The flow setup should align with business requirements.
- *Bidirectional vs Unidirectional:* Determine if the integration will be bidirectional (both systems can update each other) or unidirectional (one system sends updates to another).

4.9. Testing and Validation

- *Integration Testing:* Ensure the integration is thoroughly tested in a non-production environment. This includes validating the data mappings, flow performance, and error handling.
- *Monitoring:* Use ServiceNow's monitoring tools to track integration health and performance. Set up dashboards or alerts to monitor for any failed transactions or errors.

4.10. Documentation and Change Management

- *Documentation:* Maintain detailed documentation for the eBonding process, including technical setup, field mappings, and any custom configurations.
- *Change Management:* Ensure that any changes to the integration process are tracked and tested, particularly if integrating with production systems.

11. Service-Level Agreements (SLAs):

- *SLA Alignment:* Ensure service level agreements are defined and adhered to for the integrations. This can include timeframes for incident resolution, change implementation, and response times between systems.

You can successfully set up and manage eBonding between ServiceNow and external systems by meeting these technical and functional requirements and improving cross-system collaboration and automation.

5. Key Benefits of ServiceNow eBonding

5.1. Increased Efficiency and Automation

- *Automated Incident Handling:* ServiceNow eBonding automates creating, updating, and closing incidents between ServiceNow and other systems like vendor support platforms or IT tools. This means less manual work, faster problem resolution, and fewer mistakes caused by human error.
- *Automated Workflows:* eBonding connects different systems and automates workflows. For instance, if an external monitoring system detects an issue, it can automatically create an incident in ServiceNow, assign it to the right team, and send updates when the problem is resolved.

5.2. Faster Response and Resolution

- *Real-Time Updates:* eBonding ensures that any changes made in one system are instantly reflected in the other, helping teams stay updated and respond more quickly.
- *No Duplication of Work:* Since incident updates are automatically synchronized, teams do not need to enter the same data into multiple systems manually, speeding up issue resolution.

5.3. Better Team Collaboration

- *Improved Communication with Vendors:* If your organization works with external vendors or service providers, eBonding helps them update incident statuses directly in ServiceNow, making collaboration more efficient.
- *Unified View:* eBonding provides a central, real-time view of all incidents, requests, and updates, no matter which system the information comes from, helping teams stay aligned and avoid confusion.

5.4. Greater Data Accuracy and Consistency

- *Fewer Errors:* Because eBonding automates data transfer, there is less chance for human mistakes, leading to more reliable and consistent data across systems.
- *Accurate Incident Tracking:* With eBonding, both ServiceNow and external systems are always up to date with the latest incident information, reducing the risk of teams acting on outdated or incorrect data.

5.5. Easy Integration with Other Systems

- *Simple Connections:* eBonding makes it easy to integrate ServiceNow with a wide range of third-party tools like BMC Remedy, Jira, and SolarWinds, using ServiceNow's Integration Hub and APIs. This means no complex custom development is needed.
- *Customization:* ServiceNow allows eBonding to be tailored to your needs, whether connecting to a simple ticketing system or managing complex workflows across multiple platforms.

5.6. Better Experience for Customers and Vendors

- *Streamlined Vendor Management:* Vendors can directly update incident statuses in ServiceNow, making the process smoother and faster.
- *Happier Customers:* With quicker incident resolution, better data accuracy, and improved teamwork, customers get faster and more reliable service, leading to higher satisfaction.

5.7. Cost Savings and Lower Overhead

- *Less Manual Work:* eBonding reduces the time spent on manual data entry and system reconciliation, helping reduce costs and letting teams focus on more important tasks.
- *Simplified IT Operations:* By automating and connecting systems, eBonding reduces the need for extra tools or staff to manage separate systems, which leads to cost savings.

5.8. Improved Reporting and Analytics

- *Better Reporting:* With data from multiple systems integrated, eBonding makes it easier to generate comprehensive reports, providing better visibility into performance, incident trends, and service levels.
- *Monitoring Service Performance:* ServiceNow's reporting tools help track performance metrics across all connected systems, such as service levels and incident trends.

5.9. Scalable for Growth

- *Flexible and Scalable:* As your organization grows and adds more systems or external tools, eBonding can scale to accommodate new integrations without requiring major system changes.
- *Works in Hybrid Environments:* eBonding can integrate with both cloud-based and on-premise systems, making it perfect for businesses with a mix of old and new IT infrastructure.

5.10. Enhanced Security and Compliance

- *Data Protection:* eBonding ensures that data is securely transferred between ServiceNow and other systems using encryption and other security measures like OAuth, protecting sensitive information and ensuring

compliance with industry regulations (e.g., GDPR, HIPAA).

- *Audit Trails:* ServiceNow tracks all eBonding activities, providing an audit trail that helps ensure compliance and lets you identify any potential security risks.

5.11. Proactive Issue Management

- *Predicting and Preventing Problems:* eBonding helps identify recurring issues and trends by analyzing data from multiple systems. This allows your organization to address problems before they escalate into more significant issues.
- *Automated Issue Resolution:* In some cases, eBonding can trigger automatic solutions for problems, either through ServiceNow workflows or external systems, allowing issues to be resolved quickly and without manual intervention.

6. Conclusion

In conclusion, ServiceNow eBonding is a powerful integration solution bridging the gap between ServiceNow and external systems, enabling seamless, automated, real-time data synchronization across diverse platforms. By facilitating the exchange of incidents, requests, changes, and other critical information, eBonding enhances cross-system collaboration, drives operational efficiencies, and accelerates response and resolution times. This leads to improved service delivery, more accurate data, and better decision-making across IT and business functions. Integrating ServiceNow with external ITSM tools, monitoring systems, and service providers through eBonding fosters a unified approach to service management, reduces manual processes, and ensures consistent communication between internal and external teams. The result is faster resolution of issues, improved customer and vendor experiences, and optimized workflows supporting business agility and growth. With its ability to scale, support hybrid environments, and integrate with both on-premise and cloud-based systems, ServiceNow eBonding is an invaluable tool for organizations looking to streamline their IT service management processes, reduce costs, and improve overall service quality. As businesses navigate complex and interconnected IT landscapes, eBonding will remain a key enabler of efficient, collaborative, and proactive service management.

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