Integrations Leading Practices

Integrations provide numerous advantages and benefits to an enterprise by making different applications and systems work together. The ServiceNow Platform provides several mechanisms for developing integrations with external systems. ServiceNow integration capabilities provide a consistent architecture to support interoperability with third-party integrations while also preserving data integrity.

Benefits of system integrations

- **Improved efficiency:** Automate the internal and external enterprise resources to drive business results and avoid the usual integration boundaries between people, data, systems, and processes
- **Better decision making and problem solving:** Address business problems faster by integrating valuable resources such as legacy systems, ERP, on-premises applications, data sources, and databases with no integration boundaries inside and outside the enterprise
- **Standardization:** Apply a standard process and encourage automation by linking systems and wrapping processes with the logic and standardization of workflow and additional automation tools
- **Increased productivity:** Boost speed and productivity through re-use and out of the box integrations
- **More accurate data:** Ensure data integrity by integrating with master data at its source, thus avoiding data redundancy
- **Automation:** Automate cross-platform processes by extending workflows to core enterprise systems either with no code configurations or enterprise-grade integrations
- **Cost reduction and savings:** Reduce integration cost and complexity by using the strategic workflow platform you already have for integrations

Types of integrations

- **Cloud based Integrations**: Allow bi-directional access to data-level integrations to provide data exchanges that can serve as a trigger for a process or specific process actions
- **Point to point Integrations**: One system can read/write to another system having direct access via a protocol/API
- **MID server-based Integration**: Point to point integration where access to the enterprise system is often restricted by security firewalls

Custom integration considerations

When designing an integration strategy, some considerations must be made. The following are some custom integration considerations.

- An integration has two halves. Effort is needed on both sides - the ServiceNow instance and the remote system.
- The design is custom and specific to the customer. Although leading practices for implementation will be used, writing code is an essential part of custom integration.
- ServiceNow does things differently. The remote system will likely need to be adapted to successfully integrate with ServiceNow.

Integrations with IntegrationHub

ServiceNow IntegrationHub is a framework used to interact with third-party platforms from ServiceNow. Developers can use IntegrationHub to build integration actions to execute commands against external platforms. There are many predefined application implementations called IntegrationHub spokes.

- Examples of configurable and easy-to-use spokes for well-known IT applications include:
  - Twitter
  - Microsoft SCCM
  - Zoom
  - Twilio

When to use a MID server

MID server is an important piece of architecture when dealing with integrations.

- Data/service is behind a firewall
- The customer requires a middleware server to process code (e.g., PHP, Ruby, PowerShell, etc.)
- Discover and Orchestration is involved

Integration leading practices

- **Begin by evaluating build vs. buy**: It is always preferred to use existing functionality from ServiceNow and ServiceNow partners
- **Evaluate your integration approach**: It is important to fully scope and define the integration solution required
- **Sync relevant data**: Only capture data that align with business objectives. Use a clear strategy and make justified implementation decisions
- **Performance**: Consider the size, frequency, and transformation requirements to be the most important factors as they all have an impact on performance
- **Monitoring**: ServiceNow provides many baseline functions and features that enable the tracking of integration transactions via the respective import table
- **Utilize Correlation IDs**: Correlation IDs prevent integration data duplication
- **Focus on data security**: Any integration implementation needs to specify ServiceNow and infrastructure security
- **Error handling**: It is important to implement robust error handling functionality in any integration