



Ask the Expert: Flow and Integration Development

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boomi



Upcoming Community Events

Financial Services User Group - Kickoff Meetup

- **Date:** March 19, 2026
- **Time:** 11:00am EDT

This event brings together FS professionals, product experts, and peers to explore industry trends, share real-world experiences, and connect with others tackling similar challenges.

Ask the Expert: AI

- **Date:** March 26, 2026
- **Time:** 1:00pm EDT

Join us for Boomi Office Hours, a live Q&A with our experts offering real-time guidance and support.

Ask the Expert: Architecture

- **Date:** April 7, 2026
- **Time:** 1:00pm EDT

Join us for Boomi Office Hours – your go-to Q&A session led by Boomi Professional Services experts!

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Ruairi Fullam

Systems Engineer
Boomi

- With Boomi since 2020
- Background in Web Development and Systems Administration
- Currently a member of the Technical Success team, providing guidance and enablement for our customers for Integrate and Flow
- Hobbies include event organisation, electronics, music production and vintage computing





Questions





Question:

How can I automatically deploy a package without specifying a version in Integration?



How can I automatically deploy a package without specifying a version in Integration?

- The Boomi Platform API can be called to retrieve the latest version using:
`GET https://api.boomi.com/api/rest/v1/{accountId}/PackagedComponent/query`

Add the **component-id** and **currentVersion = true** arguments.

With this response use this API to deploy the package:

`POST https://api.boomi.com/api/rest/v1/{accountId}/DeployedPackage`

Specify the **environmentId**, **packagedComponentId** and **notes** if required.

- You can also use DevOps or CI/CD workflows - check the Boomi Documentation for more:
<https://boomi.com/blog/what-is-ci-cd/>



Question:

In Boomi Data Hub, why we cannot extract a single report of a month?



In Boomi Data Hub, why we cannot extract a single report of a month?

- The API returns a maximum of 100–200 records per page - There is no native "export all for date range" as a single flat file – you must paginate through results
- For a full month of data across multiple sources, record counts can be in the thousands or millions
- The Hub is designed for real-time record matching and mastering, not periodic batch reporting
- Golden Record History Is Incremental, Not Snapshot-Based
- A scheduled job to extract data could be used to provide this but this would require implementation of logic to filter and paginate all results and would take some time to run



Question:

As a Boomi Integration developer, how does your thought process look like when creating an integration? Any tips and tricks when it comes to creating an integration for a client? Any documents/templates/question list that can help me understand how I will go about the integration? Example: an excel file that have questions to make it easier for me when I will be interviewing a client with regards to their data integration.



As a Boomi Integration developer, how does your thought process look like when creating an integration?

- 1. Requirements Discovery** – The process begins with an exhaustive analysis of the integration's scope, identifying the source and target endpoints, data formats (such as JSON, XML, or EDI), and the necessary trigger mechanism. This phase establishes whether the integration will function as a real-time event-driven listener or a scheduled batch process, defining the "unit of work" before any configuration begins.
- 2. Resource Initialization** – Technical foundations are laid by creating Connection and Operation components. By importing profiles directly from the external systems, the developer establishes a "source of truth" for the data structures. This stage ensures that the metadata accurately reflects the physical schema of the systems being integrated, preventing structural mismatches later in the flow.

As a Boomi Integration developer, how does your thought process look like when creating an integration?

3. **Logic Design** – The high-level flow is constructed using shapes like Route, Decision, or Business Rules to direct document traffic. A primary goal in this phase is "early filtering," where malformed or irrelevant records are discarded at the start of the process. This architectural choice keeps the main execution branches clean and focused only on valid data.

4. **Transformation and Mapping**

The core logic resides within the **Map** shape, where source fields are translated into the target schema. Developers utilize **Document Caching** to pull in auxiliary data without making redundant, expensive API calls, and implement **Map Functions** to handle complex string manipulations or mathematical calculations required by the business logic.

As a Boomi Integration developer, how does your thought process look like when creating an integration?

- 5. Resilience and Error Handling** – Robust integrations prioritize resilience by implementing **Try/Catch** blocks and specialized error-routing logic. By configuring **Notify** shapes to capture specific document metadata, the system ensures that any execution failure provides immediate, actionable insights for support teams rather than vague system logs.
- 6. Iterative Testing** – Before deployment, the process undergoes rigorous verification in Test Mode. Developers examine the **Shape Source Data** at every step of the canvas to confirm that filters, properties, and maps are behaving as intended. This phase is critical for identifying performance bottlenecks or logic gaps before they impact production environments.

As a Boomi Integration developer, how does your thought process look like when creating an integration?

7. **Deployment and Documentation** - The final stage involves packaging the components and deploying them to the appropriate runtime. An integration is considered complete only when it is fully documented, with clear descriptions of each shape to ensure that the logic remains transparent and maintainable for future developers.

Check out the Boomi Blueprint Development Guidelines here:

<https://community.boomi.com/s/article/Boomi-Blueprint-Development-Guidelines>



Question:

When integrating Boomi Flow with Boomi Integration via the Flow Services Server connector, how should a wrapper JSON array profile be correctly configured so that it is exposed in Flow and supports array-based request schemas?

Currently, submitting an edited grid sends multiple objects in the `objectData` array (visible in the browser), but Integration only receives a single JSON object, and attempts to create a wrapper profile or List type either don't appear after refresh or throw a "Value cannot be null (Parameter 'TypeElementBinding')" error.

What is the recommended approach to ensure all edited grid rows are sent and processed as an array in Integration?



Sending Array Data to Flow Services Server

- A limitation of the Flow Services Server is that it only accepts a single JSON object as part of the **Message** Action.
- You will either have to send multiple **Message** Action messages or structure your Request profile to contain the necessary “layers” of data required.
- **Integration Profiles and Flow Types:**
https://help.boomi.com/docs/Atomsphere/Flow/Topics/Getting_Started/Boomi_Flow_and_Boomi_Integration/c-flo-AS_Profiles_Types_676ebeec-a3e4-495e-8c14-4da287b2751a
- Feel free to get in touch - ruairi.fullam@boomi.com



Question:

How can I build project-level knowledge and improve my understanding of how different components work?



How can I build project-level knowledge and improve my understanding of how different components work?

- **Associate Integration Developer** – Learn to create complex processes and learn about the development life cycle, document flow, properties, and developer administration tools.
- **Associate Administration** – Learn essential skills for user management, process management, understanding extensions, and more.
- **Professional Integration Developer** – This advanced course is for Boomi professional developers seeking expertise in designing and deploying advanced workflows. It covers sophisticated platform features, best practices, advanced methodologies, and common integration patterns for efficient, scalable, and maintainable solutions.



Question:

What are the most common performance bottlenecks do you see in Boomi processes?

What are the best practices for reducing execution time in complex mapping steps?



What are the most common performance bottlenecks do you see in Boomi processes?

- **Data Split & Flow Control** – Avoid single document processing
- **Excessive lookups without caching** – use Document Caches
- **Use decoupling when needed** – Event Streams for batching or slow endpoints
- **Batch large data** – Tune your integrations for throughput and resource utilisation
- **Right-size your runtime for your workload** – Tune the Java Virtual Machine for fast throughput, use JMX for useful telemetry
- **Scope your queries instead of full dumps** – Optimise your requests for the data required instead of dumping all data and filtering in Boomi



Question:

Does Boomi have a way of ingesting EDI files with any/all delimiters/segment terminators or do separate Profiles need to be setup for each different type?



What are the most common performance bottlenecks do you see in Boomi processes?

Separate profiles are needed for different delimiter/terminator configurations.

For **inbound documents**, the EDI processor parses the inbound document and considers the delimiter present in the incoming document. However, this applies within a single profile.

Profile-level delimiters: Each EDI profile defines its delimiters and segment terminators in the Options tab. When you create or import a profile (X12, EDIFACT, etc.), you can select the appropriate delimiters as requested.

Trading Partner precedence: Though EDI profile has options to define delimiters, they are helpful only during development and unit testing. Trading Partner component delimiters takes precedence over profile delimiters.

What are the most common performance bottlenecks do you see in Boomi processes?

Multiple profiles: If your incoming EDI files use different delimiter/terminator schemes, you would need separate EDI profiles for each configuration. You'd then assign the appropriate profile to the Trading Partner component handling that specific file format.

User-Defined option: For non-standard formats, you can build profiles for document types that do not conform to any of the supported standards using the User-Defined profile type.

In practice: Most partners standardize on one set of delimiters (e.g., X12 typically uses `*` as element separator and `~` as segment terminator), but if you're dealing with highly varied sources, you'd want separate profiles configured with their respective delimiters, tied to the appropriate Trading Partners.



Thank you