

Ask the Expert: Integration Development Q&A Session

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boomi

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Boomi World 2025

Dallas, Texas
May 12–15, 2025

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Upcoming Events

Boomi Platform APIM Overview and Demo

Date: March 11, 2025

Time: 10:00am PDT | 1:00pm EDT

Join us for a three part API Management Series covering the Boomi Platform APIM, Cloud API, and API Control Plane!

Higher Education User Group Meetup

Date: March 12, 2025

Time: 11:00am PDT | 2:00pm EDT

Join us as we meet for our monthly virtual Higher Education User Group!

Boomi Integration 101

Date: March 20, 2025

Time: 8:30am PDT | 11:30am EDT

Join us for a hands-on integration session! Learn to turn requirements into a functional solution, test effectively, and deploy with confidence.

<https://usergroups.boomi.com/>

Boomi Learning Update




A Better Boomi Learning Experience

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Amy, welcome to Boomi Training & Certification!

Expand your expertise across the full Boomi Platform







New to Boomi?

This path contains two introductory courses, including Integration Essentials.

2 Courses



Learning Experience Feedback

Feel free to complete this survey as often as you like, providing us with fresh ideas as your experience expands.

Enterprise-grade UX features, like:

Question 1: ✖ Incorrect answer

Which user persona is usually responsible for data governance and compliance with regulatory obligations?

- ☐ Catalog Manager
- ☐ Administrator
- ☒ Data Analyst
- ☐ Data Engineer
- ☐ Data Steward

Question 2: ✖ Incorrect answer

What can you use the Catalog function to do?

- ☐ Prepare data for analysis, using a guided 7-step experience
- ☐ Interface with, search, and discover data from source systems
- ☐ Automate workflow execution, using desired intervals
- ☒ Prepare transformation jobs, OS jobs and SQL jobs

Question 3: ✖ Incorrect answer

You are within a data set, and you want to start a chat. What do you select to begin?

- ☐ The chat icon at the top right of the screen
- ☐ In the bar at the top of the browser window
- ☒ The chat icon at the center of the screen
- ☐ On the Manage menu on the left of the screen

1. Exam performance feedback for effective studying

2. Diverse filters for **targeted** search

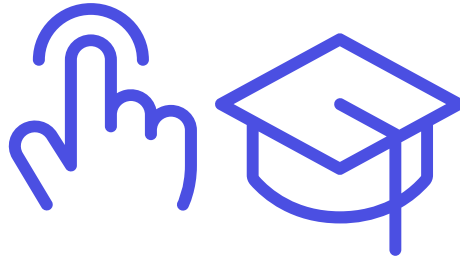
The screenshot shows a search interface with a blue header bar. At the top left is a 'Training Home' link with a back arrow. Below it is a search bar with the placeholder text 'Search' and a magnifying glass icon. To the right of the search bar is a 'Reset' link. Below the search bar is a 'Filter' section with a dropdown arrow. The filter section contains several categories with checkboxes and counts: 'Integration (35)', 'APIM (15)', 'DataHub (10)', 'Boomi AI (2)', 'B2B/EDI (7)', 'Flow (9)', 'Event Streams (4)', 'Task Automation (1)', 'Boomi for SAP (5)', 'DCP (9)', 'Runtime (8)', and 'Architect (11)'. Below the filter section is a 'Type' section with a dropdown arrow, containing 'Certification (24)', 'Course (66)', and 'Path (13)'. Below the type section is a 'Time' section with a dropdown arrow, containing '0-2 hours (59)', '3-5 hours (18)', and '6+ hours (16)'. Below the time section is a 'Language' section with a dropdown arrow, containing 'Japanese (5)'.

LinkedIn

3. Easy to share #boomicerified achievements

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- Visit train.boomi.com to start your new learning experience
- Find more details at community.boomi.com > Training
- Contact training@boomi.com with any questions





Tessa Karlovitz

Integration Consultant

- Integration Consultant with Boomi for 2 years
- Based out of San Francisco, CA
- Background in Data Science

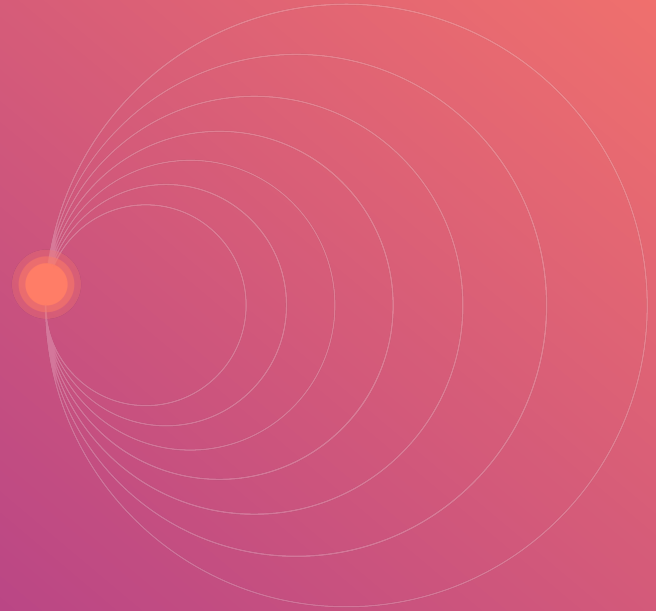
Questions



Question:

Is storing data in Dynamic Process Property is same as storing in a Document cache?

Is there any data limitation for Document cache?





DPP vs Document Cache

- **Dynamic Process Property (DPP)**
 - DPPs store data at the process execution level, meaning they are available only within the same execution instance.
 - They are best suited for storing small values (such as counters, IDs, or temporary flags) that need to be accessed across multiple shapes within a single execution.
 - The values are lost once the process execution completes unless you select the persist checkbox (not usually recommended).
- **Document Cache**
 - The Document Cache component provides a persisted, temporary storage mechanism that allows documents to be stored and retrieved across a process execution (including subprocesses).
 - Unlike DPPs, which store individual values, the Document Cache stores entire documents, making it useful for handling structured data.
 - It is useful for scenarios where you need to cache data for reuse in later executions without querying external sources repeatedly.

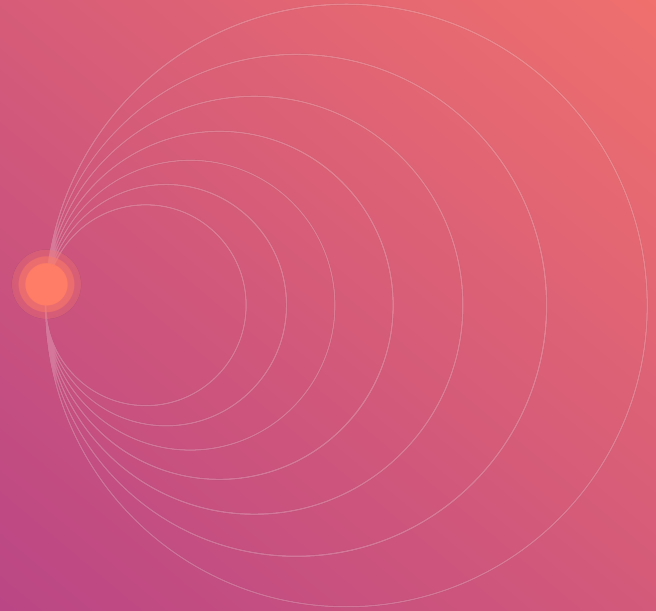


DPP vs Document Cache Continued

- Data Limitations for Document Caches
 - There is no size limit on a document cache. However, because document caches are temporarily stored on your hard disk, they are limited to the space that you have available there.
 - Large documents may impact performance, and excessive use of caching can consume system resources.
 - Remove from cache for better performance/best practice

Question:

What's the best way to conduct unit testing?



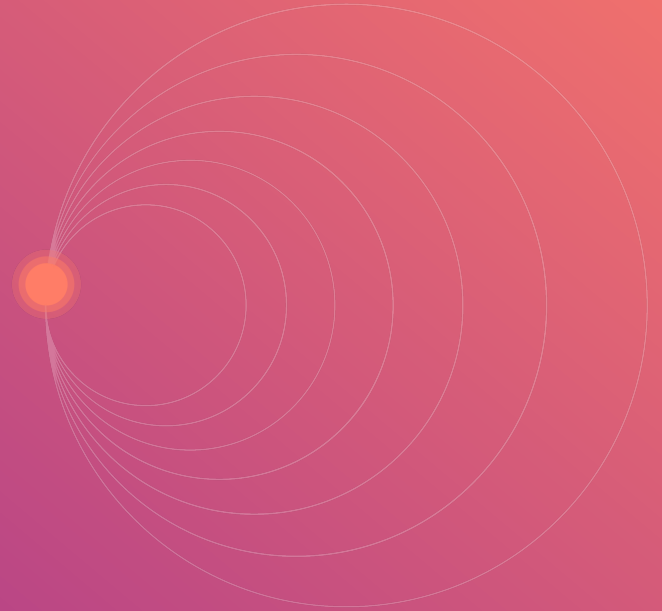


Unit Testing

- Develop integrations with test scenarios using process routes and decision shapes
 - Use Route or Decision shapes to handle success, failure, and edge cases in your integration.
 - Ensure each path is tested with different input values.
- Use Business Rules to validate data and enforce expected conditions
 - Define rules for field presence, format, or value ranges to detect invalid data early.
 - Business Rules can act as assertions to validate expected outputs.
- Store expected values in Dynamic Process Properties (DPPs) and compare them against actual results
 - Use DPPs to hold test data or calculated results for in-process verification.
 - Implement Decision shapes to compare stored values and trigger logs or alerts on mismatches.

Question:

How to update the connector properties through extension dynamically? Any best practices?



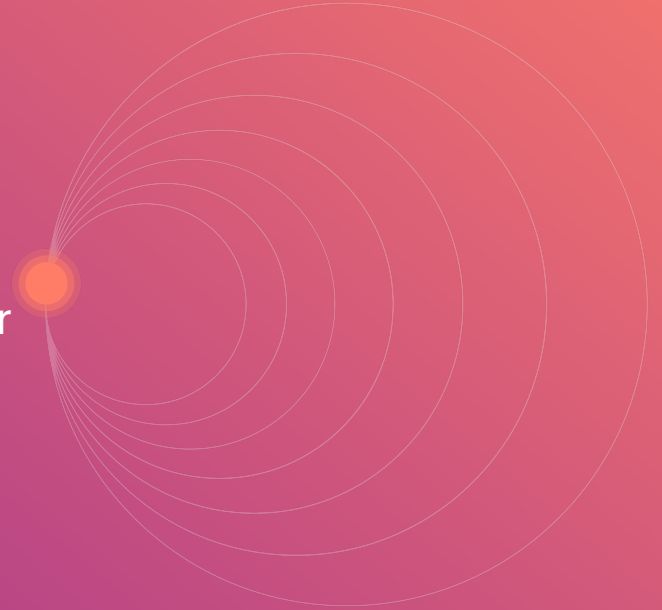


Dynamic Connection Properties

- Set the Connection Property to a Dynamic Document Property (DDP)
 - Enables dynamic connection assignment for each process execution.
- Use Process Properties for Flexible Configuration
 - Assign the connection property to a Process Property value and extend it in your environment settings for easy updates.
- Leverage Notify Shapes for Debugging
 - Add Notify shapes during testing to verify that the dynamic property is correctly assigned.
- Implement a Default Value for Fallback Handling
 - Set a default value to help identify when the dynamic property is missing or incorrectly set.

Question:

What is the best way to insert bulk records in Azure SQL Server Database using Boomi integration with DB V2 connector to get higher throughput?





Database V2 Bulk Insert

- Increase Batch Size for Higher Throughput
 - Use the Batch Count setting to group multiple records into a single transaction.
- Leverage Azure SQL's Bulk Insert Capabilities
 - Use Table-Valued Parameters (TVPs) or BULK INSERT for faster data loading.
 - Reduce row-by-row inserts to minimize SQL processing overhead.
- Optimize Performance with Stored Procedures
 - Call a Stored Procedure from Boomi to handle bulk data efficiently.
 - Use staging tables and set-based operations to improve insert speed.
- Enable Connection Pooling & Parallel Processing
 - Increase Max Connections (10-20) for concurrent inserts.
 - Use Flow Control with Parallel Execution in Boomi.
- Implement Error Handling & Retry Logic
 - Catch transient SQL errors (timeouts, deadlocks) and retry with backoff.
 - Log failures for debugging & reprocessing.

Question:

Is it possible to dynamically add credentials for a Database V2 connection at runtime, or do we need to set up separate connections for each credential?

For example, one logon/password that has read-only rights, and another logon/password that is able to update certain tables.





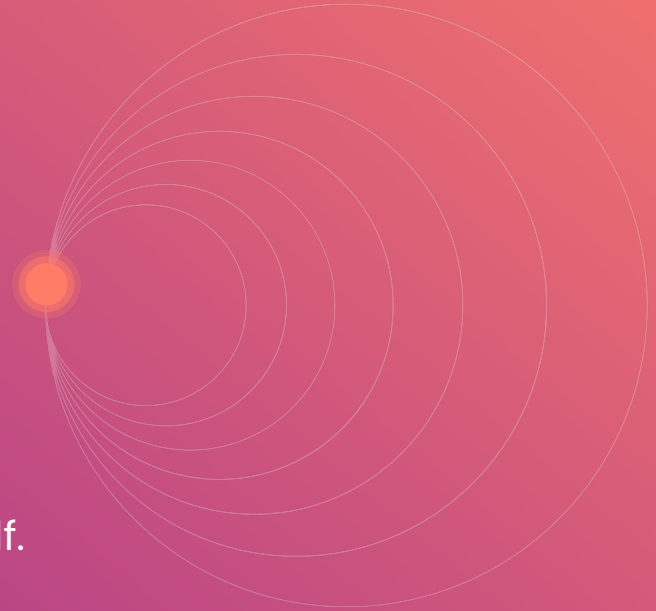
Database Credentials

- Use Extensions to Dynamically Configure Connection Details
 - Allows setting username, password, and other connection properties at the environment level.
 - Store and modify usernames and passwords via Boomi Extensions without redeploying processes.
- Each Connection Can Only Support One Set of Credentials
 - A single connection cannot dynamically switch between multiple logins for a single integration.
- Set Up Separate Connections for Different Access Levels
 - Create a Read-Only Connection and an Update-Access Connection for controlled database operations.

Question:

If I have a process/package component that was deployed to production and I'm making changes in Build to that process, what is the easiest way to tell what exactly has been changed in the component itself?

I know you can do a comparison against what is in build but that just gives you the components that were changed but I want to know what changes were made WITHIN the component itself.





Revision History/Component Changes

- No Direct Way to View Detailed Changes
 - Boomi does not provide a built-in feature to easily compare changes within a component.
- Use Component History and Revision Numbers
 - Track updates by reviewing the Component History and comparing revision numbers.
- Compare XML Definitions for Detailed Differences
 - Export the XML representation of components and compare versions to identify changes.
- Maintain Clear Documentation in Component Notes
 - Use the Notes section of packaged components to document modifications and reasons for changes.

Component XML Comparison

Component XML

```
<?xml version="1.0" encoding="UTF-8"?>
<Component xmlns:bns="http://api.platform.boomi.com/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" branchId="QjoyNzUzMzU" branchName="main" componentId="df71609d-5735-4b4f-8d53-5e52e3ea2e39" createdBy="tessa.karlovit@boomi.com" createdAt="2022-08-17T13:06:37Z" currentVersion="false" deleted="false" folderFullPath="Training-Tessa-Karlovit" folderId="Rjo0ODc4Mzgy" folderName="Training-Tessa-Karlovit" modifiedBy="tessa.karlovit@boomi.com" modifiedDate="2022-08-17T13:06:37Z" name="RandomUserMap" type="transform.map" version="1">
  <bns:encryptedValues/>
  <bns:description/>
  <bns:object>
    <Map fromProfile="eb9f600d-bed8-4154-a97c-88c5d1263170">
      <Mappings/>
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      <Defaults/>
      <DocumentCacheJoins/>
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  </bns:object>
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Close

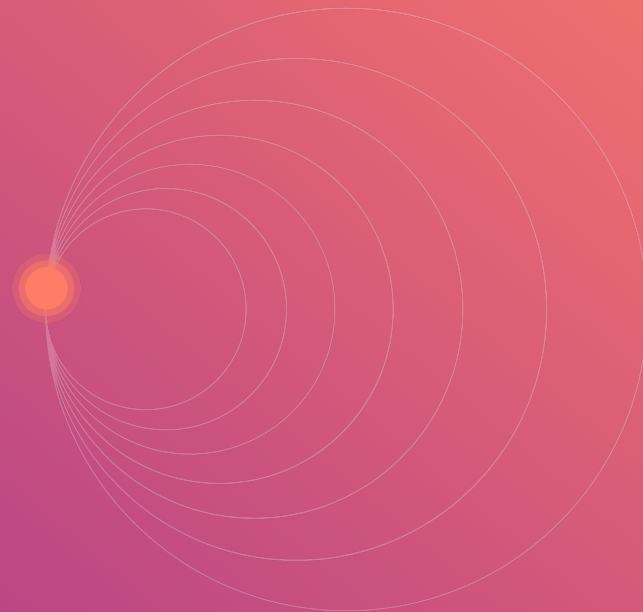
Component XML

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<?xml version="1.0" encoding="UTF-8"?>
<Component xmlns:bns="http://api.platform.boomi.com/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" branchId="QjoyNzUzMzU" branchName="main" componentId="df71609d-5735-4b4f-8d53-5e52e3ea2e39" createdBy="tessa.karlovit@boomi.com" createdAt="2022-08-17T13:06:37Z" currentVersion="true" deleted="false" folderFullPath="Training-Tessa-Karlovit" folderId="Rjo0ODc4Mzgy" folderName="Training-Tessa-Karlovit" modifiedBy="tessa.karlovit@boomi.com" modifiedDate="2022-08-17T13:32:12Z" name="RandomUserMap" type="transform.map" version="3">
  <bns:encryptedValues/>
  <bns:description/>
  <bns:object>
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        <Mapping fromKey="49" fromKeyPath="*[@key='1']/*[@key='2']/*[@key='3']/*[@key='4']/*[@key='5']/*[@key='6']/*[@key='49']" fromNamePath="Root/Object/results/Array/ArrayElement1/Object/phone" fromType="profile" toFunction="1" toKey="3" toType="function"/>
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```

Close

Question:

What do upgrades to Boomi impact in Integrations?





Updates/Upgrades

- Potential Changes to Connector Behavior
 - Upgrades may modify connector features or introduce updated versions of connectors
- Updated Functionality or Bug Fixes
 - Boomi upgrades often include enhancements to process shapes, connectors, and runtime behavior.
 - Some updates may fix known bugs that could improve performance or reliability.
- Impact on Existing Process Deployments
 - Some upgrades might affect the runtime execution of processes, requiring adjustments.
 - Review deployed processes after an upgrade to ensure they still perform as expected.



Updates/Upgrades Continued

- Changes in Environment Configuration
 - Upgrades might introduce new configuration options or require updated environment settings.
 - Ensure the environment settings are compatible with the new version after the upgrade.
- Backward Compatibility Considerations
 - Some upgrades might not be fully backward-compatible, especially for older processes or connectors.
 - Thorough testing is recommended in non-prod environments before deploying to production.
- Testing Required After Upgrades
 - Always conduct regression testing after an upgrade to ensure integrations continue to work as intended.
 - Validate that data flow, mappings, and error handling remain intact.

Questions



THANK YOU!!

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