

Ask the Expert: Architecture Q&A Session

Regan Knepp, Community Events & User Groups Lead, Boomi

boomi

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Get inspired by innovative companies across industries that are accelerating business outcomes, taming complexity, and transforming their organizations using the Boomi platform.

Upcoming Events

Virtual Events:

● Boomi Integration 101

Date: January 23, 2025, 11:30am EST

Registration: Please Register [here](#)

Agenda: Join us for a comprehensive integration session. We'll guide you through each step to ensure a successful integration. Learn how to transform requirements into a functional integration, conduct effective testing, and deploy it correctly.

● Ask the Expert: Architecture Office Hours

Date: January 29, 2025, 11:30am CET

Registration: Please Register [here](#)

Agenda: Join us for Boomi Office Hours, a live Q&A session with Boomi Professional Services experts! Submit your questions when you register or bring them to the session.

● Ask the Expert: Architecture Office Hours

Date: February 4, 2025, 1:00pm EST

Registration: Please Register [here](#)

Agenda: Join us for Boomi Office Hours, a live Q&A session with Boomi Professional Services experts! Submit your questions when you register or bring them to the session.

● Higher Education User Group Meetup

Date: February 12 2025, 1:00pm EST

Registration: Please Register [here](#)

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

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



Ben Shepherd

Systems Engineer

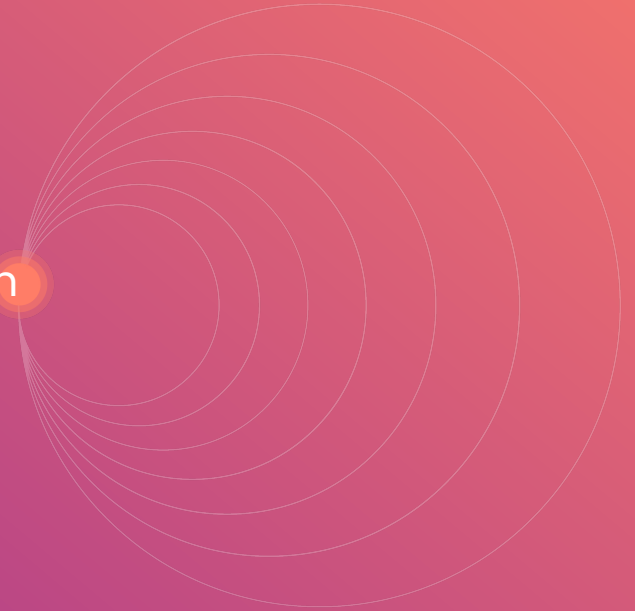
- Experienced in providing architectural design for simple and complex IT solutions involving middleware.
- Expert in delivering integration services for A2A, B2B and EAI projects involving middleware products like Boomi (Integration, API, Atom Queue, DataHub and Flow), Software AG Integration Suite (webMethods Integration Server, MWS, Broker, Universal Messaging, Trading Networks) as well as messaging products like IBM MQ Series, Oracle BMQ as well as file delivery products like XCOM, IBM Connect:Direct and GlobalSCAPE EFT Server.
- Deep knowledge with various industrial standard document formats such as EDIFACT, FlatFile, IDOC, and XML.
- Trained in basic solution architecture and Project Management. Experience and roles such as Technical Architect, Integration Lead and Project Manager.

Questions



Question:

What are your recommendations on CDCI (with Jenkins)?

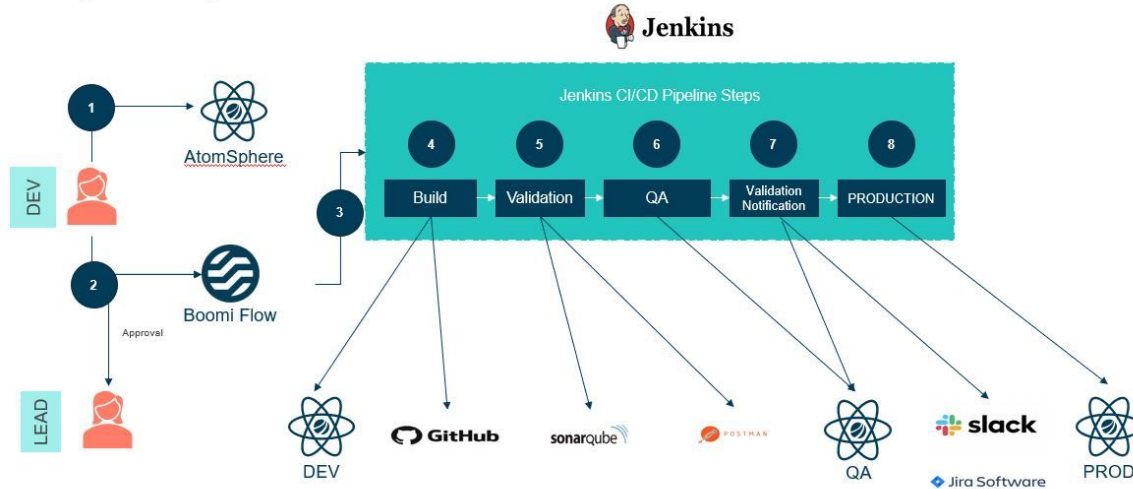


CI/CD - Reference Architecture

Suggestion: Refer to Reference Architecture

Boomi CI/CD – New Code Development

Integrate existing software tools with Boomi CICD framework



CI/CD – Reference Architecture (cont)

Use of Jenkins

Jenkins can be used to maintain your SDLC in an automated fashion.

Know your business / organisation product suite.

- Where do you maintain your delivery history?
- Do you want to perform static code analysis on components?
- What do you use for testing?
- Do you have somewhere to report / maintain bugs?
- Where do you maintain software documentation?

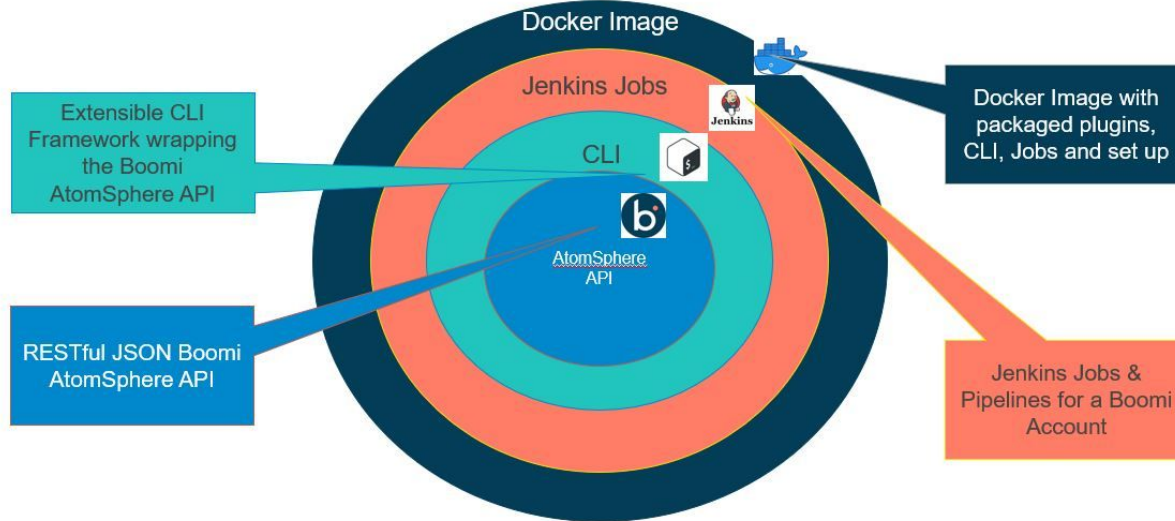
Know the scripts Boomi provide to support package delivery.

CI/CD - Reference Architecture (cont)

Setup of CI/CD components

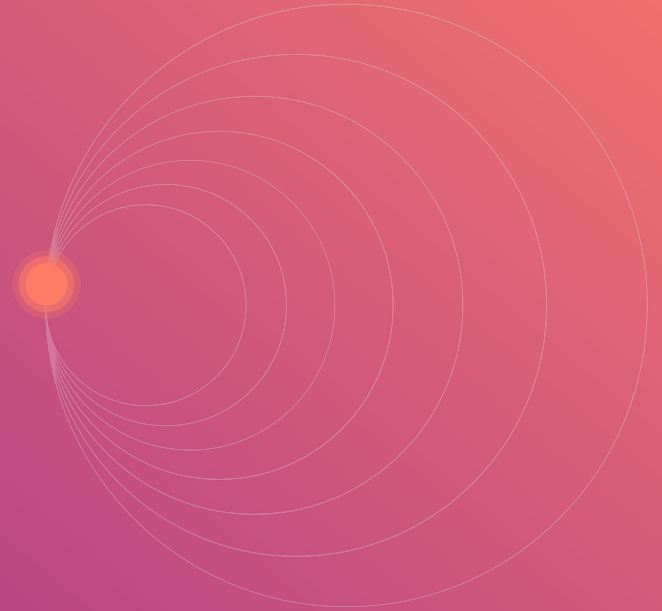
Boomi CI/CD - Ref Imp

Layered approach to meet customer CI/CD requirements



Question:

What are the best practices to handle validations of large amount of data?





Handling Large File Validation

Issues

When dealing with large files always consider your memory and file limitations. This can be done using performance testing.

- How much RAM?
- Garbage collection?
- How would you analyse?

Consider how you manage the load.

- Splitting
- Asynchronous processing

Question:

Is storing data in Dynamic Process Property the same as storing in a Document cache? Is there any data limitation for Document cache?





DPPs vs Document Cache

These two concepts suit different purposes.

Use DPPs to allow for holding values between flows.

Use Document Cache to maintain sets of associated objects during the process by use of indexing.

Document Cache can leverage DPPs.

Document Cache is stored on disk in Atom's working directory.

There are multiple use cases for document cache.



DPPs vs Document Cache

DPPs

Examples of uses:

When I get a request from a user who has passed in a role within the HTTP Header. I may want to keep that value in a DPP for future validation.

When I want to retrieve a value from the process within a script or map function.

Alternatively, based on a script, you may want to maintain a particular value.



DPPs vs Document Cache

Document Cache

Examples of uses:

When we have multiple sources and wish to join into one document. This would required common index.

When you want to perform a check to determine an existing document based on lookup.

When you would to collect similar documents (temporary "array")

When you want to perform multiple lookups based on indexes.

When managing MIME attachments in certain connectors, you can use document cache to add documents.



DPPs vs Document Cache

Document Cache

Document Cache Limitations:

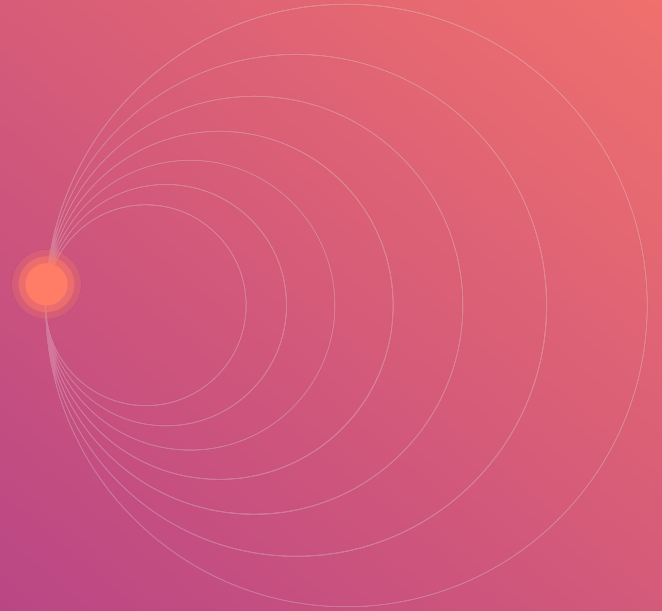
Since Document cache consists of checked documents and indexes and are stored in workdir on disk.

The cache is limited to the amount of disk space.

Special case: Low Latency, by default the amount of space available is 1MB and stored in memory. If more is required, Boomi has a override property that can alter how low latency cached documents and indexes are stored. If greater than 1MB, then the data is stored in the workdir on disk.

Question:

When any Organization is moving from one iPaaS Tool/Legacy integration tool, what all points to be kept in my mind while setting up the environment?





Migrating to Boomi from Legacy/IPaaS

Considerations

Know your landscape

- Infrastructure
- Applications
- Data storage
- Folder structure

What is your Cloud strategy?

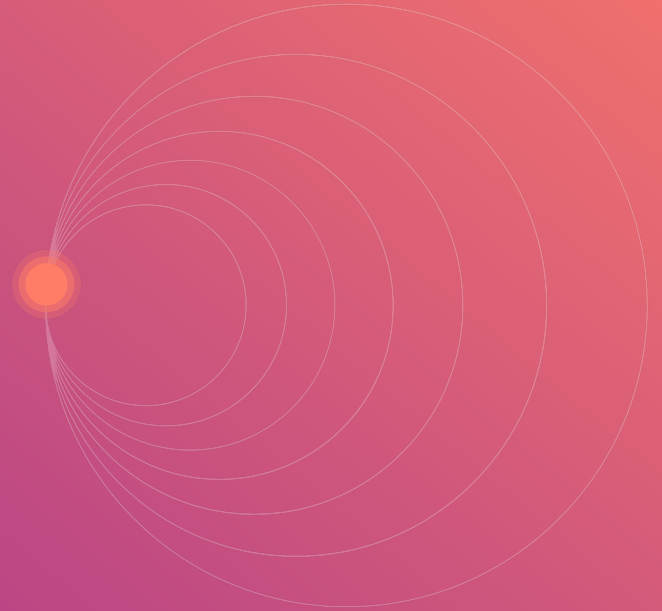
Current business processes

RPO and RTO requirements

Program Time Requirements

Question:

Is there any API which can used to migrate/deploy the Boomi code from one environment to another ?



Migrating Boomi code between Environments

Boomi Platform

Boomi does provide an API for package component create and deploy:

developer.boomi.com/api/platformapi#tag/DeployedPackage/operation/CreateDeployedPackage

You can use the CREATE operation in two ways:

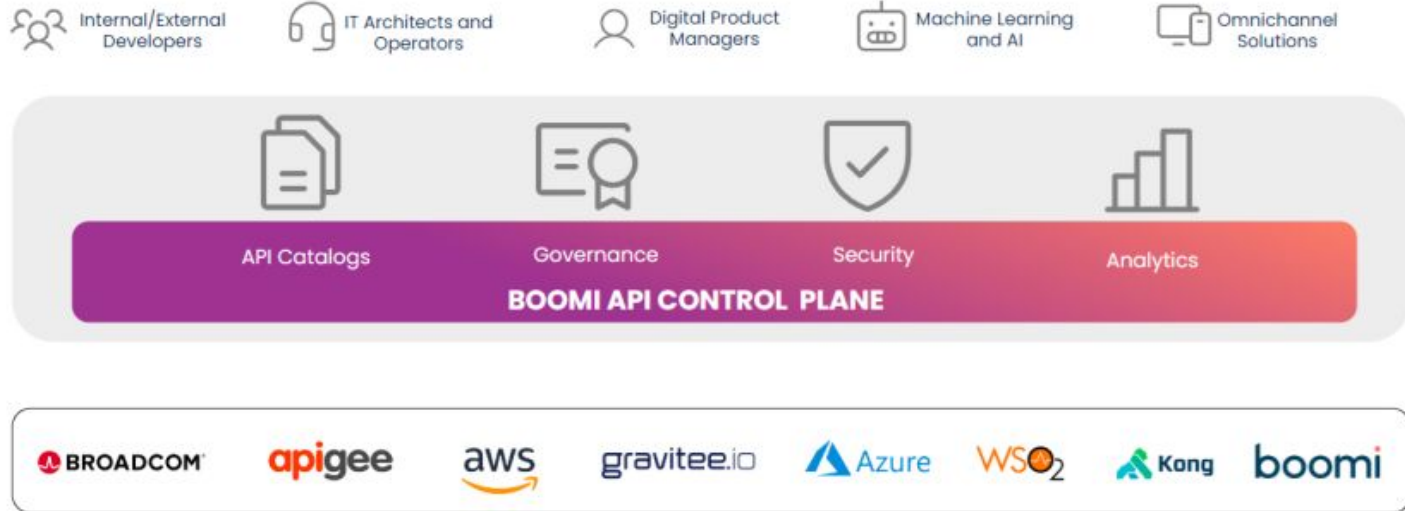
- With `environmentId` and `packageId`, CREATE deploys the specified packaged component to the identified environment.
- With `environmentId` and `componentId`, CREATE packages with the specified component and deploys the package to the specified environment.

Note: By default, deployment of listener processes are in a running state. To deploy a packaged listener process in a paused state, include the `listenerStatus` field with a value of `PAUSED`.

API Gateway Management

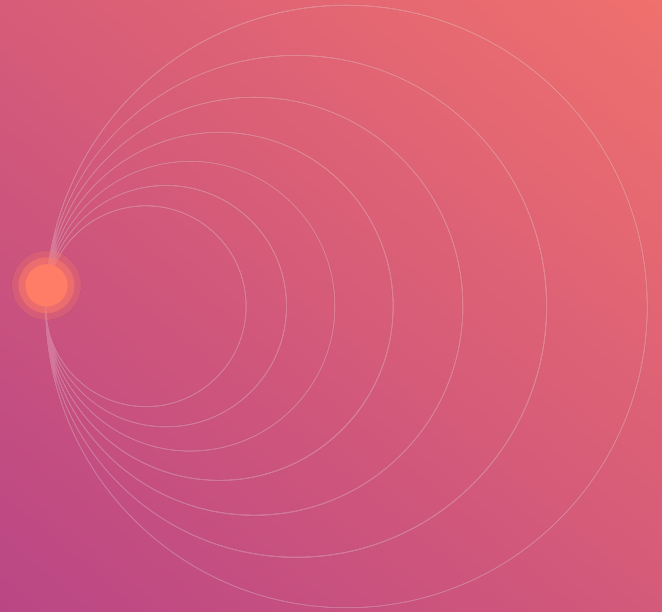
Boomi Control Plane

Boomi Control plane allows you to manage your existing assets and include Boomi APIM if desired.



Question:

What are some Boomi Architecture best practices?





Architecture Best Practices

Gather Requirements

1 – Define your organization’s Boomi ambition

- Why has the organisation elect Boomi for integration?

2 - Define the overarching principles that will influence the Boomi architecture

- HA
- Scalability
- Multi-tenancy
- Security
- DR

3 - Define the overall expected Boomi usage

- Batch vs real-time
- End-point and storage requirements
- Volume metrics



Architecture Best Practices

Runtime and Architecture

1 - Determine where the Boomi Runtime will be implemented

- Cloud-based / On-prem / Hybrid / Hosted

2 - Refer to reference architecture

- Atom / Molecule / Atom Clouds

3 - Define Environments

4 - Define Hardware Specs

5 - Define other specifications, as needed:

- Firewall rules and network configuration
- Disk space and type (where applicable)
- Physical server/Virtual Machine (VM) specifications
- File share (for clustered Runtimes):
 1. Physical server/VM
 2. File system product (e.g., AWS EFS)
- Backup/Replicate Runtime directory
- Load balancer
- Operating System (OS) prerequisites (e.g., Java versions, JRE, installation directory, service user, etc.)

Question:

Boomi plan for FY 2025 and latest IT trends





Roadmap for 2025

Last Update

- API Management
 - mTLS Authentication
 - Expect future updates based on previous API management acquisitions
- Boomi AI
 - AI Agent called Boomi Scribe was introduced to document your processes and subprocesses
- B2B/EDI
 - Added enhancements to the HL7 profile
- Connection
 - New connector Amazon Selling Partner Connector in Tech Preview
- Deprecated Connectors
 - HTTP Client / LDAP (Legacy)
- Legacy Connectors:
 - Database
 - Disk
 - FTP
 - JMS
 - SFTP



Roadmap for 2025

Last Update (continued)

- Retired Connector
 - MQTT Connector is being retired. For continued support, users should migrate to the updated MQTT Connector.
- Event Streams
 - Configurable Concurrent Execution Limits: Users can now define their own maximum concurrent executions in Transacted Acknowledged mode using the new custom container property:
 - `com.boomi.container.eventStreams.maxConcurrentExecutions`.
 - Default Settings: If no custom property is defined, the connector will enforce standard limits of a minimum value of 1 and a maximum value of 5.
 - Connector Behavior: In listening mode, the Event Streams connector will prioritize the custom property to determine execution limits.
 - Performance Recommendations: When the number of consumers approaches 60, users should be mindful of the MCE values set to avoid potential message loss or forwarding to the Dead Letter Queue (DLQ).
- Flow
 - History available between versions so you can view and compare versions
 - Enhancements to the Dashboard
-



Roadmap for 2025

Last Update (continued)

- Integration
 - New Merge and Branch feature
 - New look and feel in Canvas to ensure the user experience.
- Data Hub
 - Boomi DataHub connector is now generally available.
- Platform
 - Customer Secrets to be retrieved from your AWS Secrets Manager
 - Authentication Data for Secrets Manager can be entered in the Platform UI
 - Support the ability to rotate secrets — initiate rotation from Secrets Manager and Boomi processes to automatically intake the new secret
 - To turn on the Secrets Manager please work with your support rep. We plan to make it self-service in the near future.
-

Roadmap for 2025

Product Updates for 2025 – Sign up to Webinars

Be sure to visit : <https://boomi.com/product-updates>

16
Jan

Boomi
Product Roadmap
Q1 2025

Product Roadmap Webinar

Boomi Product Roadmap
Webinar CY25 Q1

🕒 11:00 am ET 📍 Virtual

[Register now](#)

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Apr

Boomi
Product Roadmap
Q2 2025

Product Roadmap Webinar

Boomi Product Roadmap
Webinar CY25 Q2

🕒 5:00 pm ET 📍 Virtual

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Jul

Boomi
Product Roadmap
Q3 2025

Product Roadmap Webinar

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Webinar CY25 Q3

🕒 11:00 am ET 📍 Virtual

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Oct

Boomi
Product Roadmap
Q4 2025

Product Roadmap Webinar

Boomi Product Roadmap
Webinar CY25 Q4

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Questions



THANK YOU!!

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