Cloud Data and Application Integration, Specialist Certification

About the Informatica Certified Specialist Cloud Data and Application Integration Test and the Skill Set Inventory

This test measures your knowledge of Informatica Cloud Services Data and Application Integration. Measured areas include Informatica Cloud architecture, data integration features, data synchronization, cloud mapping designer, data masking, and data replication. It will test your knowledge of integrating applications and systems, the implementation of business processes, using the process designer, and exposing composite APIs.

The skill set inventory is used to guide your preparation before taking the test. It is an outline of the technical topics and subject areas that are covered in each test. The skill set inventory includes test domain weighting, test objectives and topical content. The topics and concepts are included to clarify the test objectives.

Test takers will be tested on:

- Building and running tasks, mappings, and taskflows
- Installation of Informatica Cloud Secure Agent
- Automation of data integration jobs
- Cloud Mapping Designer and Mapping Tasks
- Advanced features used to enhance and optimize integrations
- Administration tasks in IICS org
- Installation of Secure Agent
- Transformations like Hierarchy Parser, Unconnected Lookups, and so on
- Advanced features such as Macro Expressions and Dynamic Linking
- Parameterization and Pushdown Optimization features
- REST web services
- Advanced settings such as PK Chunking, Pre/Post SQL, and SQL Override
- Discovery IQ
- Cloud Application Integration (CAI)
- Basic flows using process
- Flows as API endpoints
- Third-party REST/SOAP services in the flow
- Error handling
- APIs using API portal

Training Prerequisites

The skills and knowledge areas measured by this test are focused on product core functionality inside the realm of a standard project implementation. Training materials, supporting documentation and practical experience may become sources of question development.

The suggested training prerequisites for this certification level are the completion of the following Informatica course(s):

- IICS: Cloud Data Integration Services (Instructor Led) OR
- IICS: Cloud Data Integration Services 101 (onDemand) and IICS: Cloud Data Integration Services 201 (onDemand)
 AND
- Cloud Application Integration Processes for Developers (onDemand or Instructor Led)
Test Domains

The test domains and the extent to which they are represented as an estimated percentage of the test follows:

<table>
<thead>
<tr>
<th>Title</th>
<th>% of Test</th>
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<tbody>
<tr>
<td>Cloud Overview</td>
<td>3%</td>
</tr>
<tr>
<td>Informatica Cloud Secure Agent and Architecture</td>
<td>3%</td>
</tr>
<tr>
<td>Creating Connections</td>
<td>3%</td>
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<tr>
<td>Data Synchronization Application</td>
<td>3%</td>
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<tr>
<td>Relationships and Integration</td>
<td>3%</td>
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<tr>
<td>Qualifying and Transforming Source Data</td>
<td>3%</td>
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<tr>
<td>Advanced Source Options and Field Lookups</td>
<td>2%</td>
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<tr>
<td>Data Replication Application</td>
<td>3%</td>
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<tr>
<td>Automating and Monitoring Tasks</td>
<td>3%</td>
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<tr>
<td>Cloud Mapping Designer</td>
<td>9%</td>
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<tr>
<td>Mapping Task and Mapping Parameters</td>
<td>6%</td>
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<tr>
<td>Advanced Task Options and Salesforce Options</td>
<td>4%</td>
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<tr>
<td>Data Masking Application</td>
<td>3%</td>
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<tr>
<td>Basic Administration and Advanced Administration</td>
<td>8%</td>
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<tr>
<td>Taskflows: Linear Taskflow and Mass Ingestion Task</td>
<td>3%</td>
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<tr>
<td>Introduction to Cloud &amp; Platform Interoperability</td>
<td>1%</td>
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<tr>
<td>Expression Macro and Dynamic Linking</td>
<td>3%</td>
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<tr>
<td>Hierarchical Connectivity</td>
<td>4%</td>
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<tr>
<td>Informatica Cloud REST API</td>
<td>1%</td>
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<tr>
<td>Performance and Scalability</td>
<td>7%</td>
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<tr>
<td>Advanced Properties Settings</td>
<td>4%</td>
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<tr>
<td>Discovery IQ</td>
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<tr>
<td>Advanced Parameterization and REST Utilization</td>
<td>3%</td>
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<tr>
<td>Exception Handling</td>
<td>3%</td>
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<tr>
<td>Introduction to Cloud Application Integration and Basic Building Blocks</td>
<td>2%</td>
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<tr>
<td>Process Samples</td>
<td>4%</td>
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<tr>
<td>Error Handling and Working with API</td>
<td>2%</td>
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<tr>
<td>Connections</td>
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</table>
Question Format

You may select from one or more response offerings to answer a question.

You will score the question correctly if your response accurately completes the statement or answers the question. Incorrect distractors are given as possible correct answers so that those without the required skills and experience may wrongly select that choice.

A passing grade of 70% is needed to achieve recognition as an Informatica Certified Specialist (ICS) in Cloud Data and Application Integration.

You are given 90 minutes to complete the test. Formats used in this test are:

- Multiple Choice: Select one option that best answers the question or completes the statement
- Multiple Response: Select all that apply to best answer the question or complete the statement
- True/False: After reading the statement or questions select the best answer

Test Policy

- You are eligible for one attempt and re-take, if needed, per test registration.
- If you do not pass on your first attempt
  - Purchase of the test will include one second-attempt if a student does not pass an test.
  - You must wait two weeks after a failed test to take the test again.
  - Any additional retakes are charged the current fee at the time of purchase.
  - Promotions are excluded and cannot be combined.
Test Topics

The test will contain 70 questions comprised of topics that span across the sections listed below. In order to ensure that you are prepared for the test, review the subtopics with each section.

Informatica Cloud Overview
- Object Synchronization
- Process Synchronization
- Data Replication and Archiving
- Informatica Cloud Applications

Informatica Cloud Secure Agent and Architecture
- Informatica Secure Agent Architecture
- Agent Log File
- Running Agent as Local/Network User

Creating Connections
- Connection Properties
- Connection types
- Configuring a connection
- Creating a Salesforce.com Connection
- Creating a Flat File Connection

Data Synchronization Application
- Data Synchronization Operations
- Field Information
- Activity Logs

Relationships and Integration
- Purpose of external ID
- External ID fields in Salesforce.com
- Foreign Keys
- Salesforce ID
- Data Synchronization Operations – IDs

Qualifying and Transforming Source Data
- Data Filter
- Simple and Advanced Data Filter
- System Variables in a Data Filter
- Incremental Processing
- Field Expression

Advanced Source Options
- Multiple Object Source Type
- Salesforce Objects – Options
- Salesforce Data Model and ERDs
- Saved Queries

Field Lookups
- Configuring a Lookup
- Lookup Best Practices

Data Replication Application
- Data Replication Source and Target Options
- Other Data Replication Task Options
- Resetting the Target Table
- Non-Unique Index

Automating and Monitoring Tasks
- Schedules
- Task Flow
- Email Notifications
- Informatica Cloud Mobile App

Cloud Mapping Designer - Part I & Part II
- Mapping Lifecycle
- Transformations in Cloud Mapping Designer
- Mapping Validation
- Creating a Mapping
- Joiner, Expression, and Lookup transformations
- Field Rules: Renaming Fields, Selection Criteria

Mapping Task and Mapping Parameters
- Adding Parameters to a Mapping
- Parameter Types
- Parameter Panel and Best Practices
- Mapping Updates and Deployment
- Creating, testing, and running a Mapping Task

Advanced Task Options
- Pre and Post-Processing Commands
- Operating System Commands
- Parameter File
- Setting Up a Parameter File

Advanced Salesforce Options
- Salesforce target batch size
- Salesforce bulk API
- Salesforce outbound messaging to trigger a synchronization task

Data Masking Application
- Data Subset: Row Limits and Data Filters
- Building, testing, and running a Data Masking task

Administration
- User Roles
- User Groups
- Object level permissions
- Organization hierarchy
- Migrating Assets

Linear Taskflow
- Tasks included in a Linear Taskflow
- Properties of a Linear Taskflow
- Scheduling a Taskflow

Mass Ingestion Task
- Functionalities and Mass Ingestion Task
Introduction to Cloud & Platform Interoperability
- Informatica Cloud as a SaaS application
- Informatica Cloud as a platform and understanding its architecture
- Data Integration and Real Time Integration in Informatica Cloud
- Features of Informatica Cloud

Cloud Mapping Designer
- Aggregator Transformation Overview
- Aggregator Transformation – Source and Target
- Normalizer Transformation
- Normalized Fields
- Lookup Transformation
- Unconnected Lookup

Expression Macro and Dynamic Linking
- Dynamic Linking
- Flat File Target Time Stamps
- Macros Expression
- Types of Expression Macro
- Performing Dynamic linking

Hierarchical Connectivity
- Web Services and-REST Web Services
- Parameters of REST Web Service Message
- REST Connector – Support
- REST Web Services – Recommendations and Best Practices
- Web Service Transformation
- Hierarchical Schemas
- Hierarchy Parser Transformation
- Hierarchy Builder Transformation
- Creating a task to consume RESTful Open Weather Service
- Using Web Service Transformation in a mapping

Informatica Cloud REST API
- Configuring a Request
- Synchronization Task using Cloud REST API

Performance and Scalability
- Pushdown Optimization
- Taxonomy of Data Integration Approaches
- Combination and comparison of ETL and ELT Approach
- Pushdown Optimization Guidelines and Best Practices
- Partitions
- Types of Partitioning
- Partitioning Rules and Guidelines
- Secure Agent Groups with Multiple Agents
- Mapping Configuration Task with full Pushdown Optimization enabled
- Multiple partitions to process data concurrently

Advanced Properties Settings
- SQL Overrides in Lookups
- Lookup SQL Override Attributes
- PK Chunking
- Optimal Chunk Size
- Pre and Post SQL commands
- Lookup SQL Override command

Discovery IQ
- Discovery IQ Features

Advanced Parameterization and REST Utilization
- Benefits of Informatica cloud REST API and Parameterization
- Parameterization technique in a mapping

Exception Handling
- Exception Classification
- Default Field Value Setting
- Row Error Logging
- Error Handling Settings
- Fatal Exceptions
- Reject files or Bad files
- IICS Mapping to handle Non-Fatal errors

Taskflows
- Taskflow Steps
- Taskflow Templates
- Parameters in Taskflows

Advanced Administration
- Custom Roles
- Asset Level Permissions
- Rules and Guidelines for Permissions
- Project or Folder Access Using User Groups
- Administrative settings for the organization

Getting Started
- Process Designer
- Hello World Process – Your First Process
- Echo Input Process – Have a nice day
- Best Practices - Naming assets and Implementing flows

Basic Building Blocks
- Connector and Connection Overview
- Create Service Connector
- Create Process Object and use in a Process

Process Samples
- Simple Orchestration - Account Detail Lookup
- Third-Party Authentication - Managing Marketo Leads
- Order Processing
- Create Messaging Service Process
- List Processing using Subprocess
Skill Set

Error Handling
- Handling Credential Failures

Working with API
- API Portal

Connections
- JDBC Connection
- Create File Connection
- Using File Connection in a Process
- Install Salesforce Managed Package
- Create Salesforce Connection
- Using Salesforce Connection in a Process
- Create AMQP Connection
- Create Email Connection
- Using Email Connection in a Process
- Create Amazon S3 Connection
Sample Test Questions

*Informatica Cloud allows users to*

A. ✔️ Synchronize account data  
B. ✗ Work from their handheld devices  
C. ✔️ Import data on sales leads  
D. ✗ Monitor PowerCenter jobs

*Informatica Cloud system variables can be used to*

A. ✔️ Read only those records that have been inserted or updated since the task last ran.  
B. ✔️ Read only those records that have changed since the last time the task ran.  
C. ✔️ Read only those records that were created since the date the task last ran.  
D. ✔️ Read only those records that were created since the datetime the task last ran.

*Expression transformations cannot use aggregate functions.*

A. ✔️ TRUE  
D. ✗ FALSE

*Which of the following Data load types are possible in IICS?*

A. ✔️ Cloud to Cloud  
B. ✔️ Cloud to Ground  
C. ✔️ Ground to Cloud  
D. ✔️ Ground to Ground

*Which of the following services is used to design a Processes in CAI*

A. ✔️ Process Designer  
D. ✗ Monitor
When You Are Ready To Test:

Informatica Specialist Certifications are available Anytime/Anywhere. To become an Informatica Certified Specialist (ICS), please follow these steps.

1. Go to the Informatica Certification Trainings located [here](#).
2. Login with your Informatica Passport or create your account.
3. Locate the Certification you wish to take, click Certification under the title.
4. You will be brought to the Certification Details Page, click Enroll.
5. Click Add to Cart and complete your registration/purchase.
6. Once you have registered go to My Training and View Your Transcript.
7. Now you can simply Launch and take your test Anytime/Anywhere prior to your test's expiry date.
8. **Retake Policy:** Current purchases of the test will include one second-attempt if a student does not pass a test. Any additional retakes are charged the current fee at the time of purchase. Promotions are excluded and cannot be combined. You must wait two weeks after a failed test to take the test again.