IBM Watson IoT Professional Certification Program

Study Guide Series

Exam C1000-057 IBM Watson IoT TRIRIGA Solution Architect V1

Purpose of Exam Objectives

When an exam is being developed, the Subject Matter Experts work together to define the role the certified individual will fill. They define all of the tasks and knowledge that an individual would need to have in order to successfully implement the product. This creates the foundation for the objectives and measurement criteria, which are the basis for the certification exam.

The Watson IOT Certification item writers used these objectives to develop the questions that they wrote, and which will appear on the exam.

It is recommended that you review these objectives. Do you know how to complete the task in the objective? Do you know why that task needs to be done? Do you know what will happen if you do it incorrectly? If you are not familiar with a task, then go through the objective and perform that task in your own environment. Read more information on the task. If there is an objective on a task there is about a 95% chance that you WILL see a question about it on the actual exam.

After you have reviewed the objectives and completed your own research, then take the assessment exam. While the assessment exam will not tell you which question you answered incorrectly, it will tell you how you did by section. This will give you a good indication as to whether you are ready to take the actual exam or if you need to further review the materials.

Note: This is the high-level list of objectives. As you review these objectives, you will see a more detailed level of how to perform the task.

IBM Watson IoT TRIRIGA Solution Architect V1

SECTION 1 Real Estate and Portfolio Management

TASK: 1.1

TEST OBJECTIVE: Describe the TRIRIGA Transaction Management Capabilities

SUBTASK(S):
- 1.1.1 Explain the benefits of using TRIRIGA Real Estate Portfolio Planning and Transaction Management
- 1.1.2 Describe the Real Estate Plan Types and explain how they may be used (Portfolio plan, Implantation plan and Transaction plan)
- 1.1.3 Describe the features of a Transaction Plan
- 1.1.4 Describe the ways in which Real Estate Transaction Plans may be initiated
- 1.1.5 Describe the Real Estate Project Types and how they may be used to support Transaction Plans
- 1.1.6 Describe the relationship between Real Estate Lease Projects and Lease Abstracts
- 1.1.7 Understand what the various templates are and how they may be used to replicate common details and tasks for consistent management of similar planning and transaction exercises.

Reference:
Planning Real Estate Transactions and Projects
https://www.ibm.com/support/knowledgecenter/en/SSFCZ3_10.6.0/com.ibm.tri.doc/ret_overview/t_ctr_plan_re_transactions.html

TASK: 1.2

TEST OBJECTIVE: Describe the TRIRIGA Lease Administration Capabilities

SUBTASK(S):
1.2.1 Describe the types of property contracts supported (i.e. Owned property agreements, Real Estate & Asset/Equipment leases, expense and income leases)
  1.2.1.1 Understand the critical lease data captured
  1.2.1.2 Understand primary lease associations

1.2.2 Describe the primary lease management process flows
  1.2.2.1 Explain the Real Estate Lease Abstraction capabilities and their advantages
    1.2.2.1.1 Understand the benefits of Templates (Lease & Clauses)
    1.2.2.1.2. Understand the benefits of Wizards (Payment Schedules & Options)
  1.2.2.2 Explain the advantages of the embedded process flow between lease administration and lease accounting
  1.2.2.3 Describe the use of contact roles for efficient notifications and approvals

1.2.3 Describe the ongoing lease management processes available
  1.2.3.1 Understand how payments are processed
  1.2.3.2 Understand how index adjustments are managed

1.2.3.3 Understand how percent rent and sales reporting are managed

1.2.3.4 Understand how Common Area Maintenance is set up and reconciliations are managed.

1.2.4   Understand how lease changes are managed

1.2.4.1 Describe the lease amendment process and associated audit trail

1.2.4.2 Understand Payment Adjustments and Instruction Changes

Reference:
Managing leased and owned property contracts
https://www.ibm.com/support/knowledgecenter/en/SSFCZ3_10.6.0/com.ibm.tri.doc/con_overview /t_ctr_manage_contracts.html

TASK: 1.3

TEST OBJECTIVE: Describe the TRIRIGA Lease Accounting Capabilities

SUBTASK(S):
1.3.1   Understand how TRIRIGA Lease Accounting has been designed to support customer efforts to comply with US GAAP and IFRS accounting standards

1.3.1.1 Understand which lease accounting standards are supported (e.g. ASC840, ASC842, IAS17, IFRS16)

1.3.1.2 Understand the primary lease accounting scenarios supported (e.g. tenant/expense, real estate and equipment, adoption/creation, modification/reassessment, termination, etc.)

1.3.1.3 Understand the primary lease accounting scenarios which require configuration (e.g. lessor/income, non-standard calendar, low value leases, classification change from Finance to Operating, etc.)

1.3.2   Describe the various elements required to set up Lease Accounting in TRIRIGA

1.3.2.1 Identify the Lease Accounting Application Settings and how they are used

1.3.2.1 Understand the set-up elements required for Journal Entry generation (e.g. Business Unit/Legal Entity, General Ledger Segments, General Ledger Codes, Journal Entry Set up records, etc.)

1.3.3   Understand the controls in place to support customer lease accounting processes

1.3.3.1 Describe the role separation and embedded process flow between lease administration and accounting

1.3.3.2 Describe the controls and audit capabilities in place to capture historical details as leases are created, reviewed, modified and terminated.

1.3.4   Describe the key lease inputs required for TRIRIGA Lease Accounting

1.3.4.1 Understand the lease data elements and their impact on Lease Accounting

1.3.4.2 Understand the lease accounting parameters and their impact on resulting Right of Use Asset and Liability calculations, Lease Classification determination and Operating or Finance schedules.

1.3.4.3 Describe how Local Reporting is supported in IBM TRIRIGA Lease Accounting

1.3.5   Describe how IBM TRIRIGA may be used as a Lease Accounting Subledger (e.g. event and periodic journal entries, period close, etc.)

1.3.6   Describe how IBM TRIRIGA provides support for a customer's Lease Accounting disclosure reporting activities.

1.3.7   Understand how IBM TRIRIGA supports Lease Modification (e.g. index adjustments, amendments, re-assessments) and Termination

Reference:
IBM TRIRIGA Lease Accounting wiki
https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/IBM%20TRIRIGA1/page/Lease%20Accounting

IBM TRIRIGA 10.5.3 Lease Accounting Implementation Guide
https://www.ibm.com/developerworks/community/groups/service/html/communityview?communityUuid=9e3a5b9d-6a06-4796-a6c1-5137b626e39c#fullpageWidgetId=W89a8af160e64_4167_a047_b5bc553dcaf4&file=ce5b77e5-ac73-4d8e-91c7-c6e11b6524e4

IBM TRIRIGA 10.5.3.1-10.6.0.1 Lease Accounting Release Notes.pdf
https://www.ibm.com/developerworks/community/groups/service/html/communityview?communityUuid=9e3a5b9d-6a06-4796-a6c1-5137b626e39c#fullpageWidgetId=W89a8af160e64_4167_a047_b5bc553dcaf4&file=184111c7-69e6-4112-bff8-382fe7846ba1

SECTION 2   Capital Project Management

TASK: 2.1
TEST OBJECTIVE: Understand Program & Funding Management

SUBTASK(S):
2.1.1 Explain the importance of managing programs within an organization.
2.1.2 Define how a program can be initiated.
2.1.3 Describe the request process within program management.
2.1.4 Describe the relationship between a program, its funding sources & projects.
2.1.5 Describe how multiple funding sources can be applied to a project.
2.1.6 Define the difference between a funding source and a funding allocation.
2.1.7 Define the concept of sub-programs
2.1.8 Explain how funding allocations roll up to the program level

TASK: 2.2
TEST OBJECTIVE: Explain End to End Project Execution
SUBTASK(S):

2.2.1 Define the concept of a 'project'.
2.2.2 Explain the various ways a project schedule can be created.
2.2.3 Identify the 3rd party tools that can be utilized with TRIRIGA Projects.
2.2.4 Explain the critical path and how it is reflected in the project schedule.

2.2.5 Understand the concept of a 'baseline' in a project schedule.

2.2.6 Explain the different types of projects.

2.2.7 Explain the concept of a project budget.

2.2.8 Understand the management of a schedule using the Gantt viewer.

2.2.9 Describe the relationship between a vendor and a project.

2.2.10 Identify key components in the procurement of a project

2.2.11 Understand how a bid is set up.

2.2.12 Explain the options for responding to a bid request.

2.2.13 Describe the key performance indicators of a project.

2.2.14 Explain how TRIRIGA can incorporate and store project-related documents.

2.2.15 Describe how day-to-day progress records are maintained and the types of records that can be captured.

2.2.16 Understand the close-out process of a project.

2.2.17 Identify the various ways a project can be initiated

2.2.18 Explain how templates can be applied to project management records

2.2.19 Explain the concept of a project container

SECTION 3 Space Management

TASK: 3.1

TEST OBJECTIVE: Understanding of Space and Portfolio Set Up

SUBTASK(S):

3.1.1   Describe the fundamental data requirements for setting up a Portfolio

3.1.2   Understand the role of Space Classification setup in proration calculations (e.g., BOMA, IFMA)

3.1.3   Define the location hierarchy

3.1.4   Identify the minimum data elements for setting up a Room record

3.1.5   Identify the various types of Portfolio records

3.1.6   Describe key application settings for Space and Move Management

3.1.7   Describe the Space entitlement set up process

Reference:

https://www.ibm.com/support/knowledgecenter/SSFCZ3_10.5.1/com.ibm.tri.doc/pdfs/pdf_tri_port folio_mng.pdf

TASK: 3.2

TEST OBJECTIVE: Understanding key processes within Space Management

SUBTASK(S):

3.2.1   Describe how to attach / upload a AutoCAD drawing to a Floor record

3.2.2   Identify the MAC process from request to change / updating room, asset, and personnel record(s)

3.2.3   Define the association between an Asset record, Portfolio, and Personnel record(s)

3.2.4   Describe the setup of a Reservation record related to a Portfolio record, Asset record, and inventory record

3.2.5   Describe the UX applications that support key Space management processes

3.2.6   Describe the capabilities of the Space Manager

3.2.7   Describe the Design Change Request process

Reference:
https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/IBM%20TRIRIGA1/page/Space%20management%20implementation

https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/IBM%20TRIRIGA1/page/UX%20Perceptive%20Apps

TASK: 3.3

TEST OBJECTIVE: Understand Space and Scenario Planning functional capabilities

SUBTASK(S):
3.3.1   Describe the set-up process of the Strategic Facilities Planning (SFP) solution

3.3.2   Describe the potential impact of executing a scenario

3.3.3   Identify the Application settings supporting the SFP setup

3.3.4   Describe how Forecast Surveys capture future demand

3.3.5   Describe the analysis of the supply and demand results for a specific scenario within a Space Plan

3.3.6   Describe the capabilities of the Stacking Plan

Reference:
https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/IBM%20TRIRIGA1/page/SFP%20Overview

https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/IBM%20TRIRIGA1/page/SFP%20Portfolio%20Setup

https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/IBM%20TRIRIGA1/page/SFP%20Application%20Setup

https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/IBM%20TRIRIGA1/page/SFP%20Planning%20Setup%20and%20Forecasts

https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/IBM%20TRIRIGA1/page/SFP%20Planning

https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/IBM%20TRIRIGA1/page/SFP%20Planning%20For%20Each%20Scenario

SECTION 4 Operations and Maintenance

TASK: 4.1

TEST OBJECTIVE: **Demonstrate a solid understanding of the TRIRIGA Set-Up requirements within the TRIRIGA Operations & Maintenance Module**
(Understanding of Operations Data set up)

SUBTASK(S):
4.1.1   Explain how to set up a Schedule-Based Preventative Maintenance Plan.
4.1.2   Explain how to set up a Reading-Based Preventative Maintenance Plan.
4.1.3   Describe how to add a new Request Classification to the Workplace Services Perceptive Application.
4.1.4   Explain the set-up considerations and activities required to automatically assign a Work Task to a Service Technician using a Service Agreement.
4.1.5   Explain purpose of the TRIRIGA Dispatch Manager and how and when it is typically used.
4.1.6   Describe the set-up of service fulfillment automation in TRIRIGA. (e.g., project or task, routing assignments etc.)
4.1.7   Describe the set up required to facilitate Inventory Locations and describe their purpose.
4.1.8   Describe the purpose of Inventory Cost Groups.
4.1.9   Identify and describe the Inventory core components within TRIRIGA. (Classifications, Specifications, Locations, and Inventory Items).
4.1.10   Describe the set-up steps required to ensure that a Survey is sent to a requester after a Service Request has been completed.
4.1.11.   Describe how a user would set-up a Product Catalogue and outline the purpose of a Product Catalogue.
4.1.12   Describe how to set up Procedures and Procedure Steps to be performed on a routine Work Task.
4.1.13   Describe how a user would set up a Vendor record.

Reference:
https://www.ibm.com/support/knowledgecenter/en/SSFCZ3_10.6.0/com.ibm.tri.doc/common/t_ctr
_maint_ops_svcs.html

TASK: 4.2

TEST OBJECTIVE: **Demonstrate an understanding of Operations & Maintenance key processes and functional capabilities.**
(Understanding of key processes Operations and maintenance)

SUBTASK(S):
4.2.1   Describe the TRIRIGA Service Management Process flows.
4.2.2   Describe the Corrective Maintenance request process.
4.2.3   Describe how a maintenance supervisor assigns Work Tasks to Technicians.
4.2.4   Explain the Inventory Valuation Methods (FIFO) (LIFO) & Standard Valuation method.
4.2.5   Describe how to move items in and out of inventory.

4.2.6   Describe how an inventory count is performed.
4.2.7   Describe how the purchasing process is initiated. (to include Bid, Request for proposal and request for quotation)
4.2.8   Explain how a user will identify and track the products and services that an organization procures to support its projects, maintenance and other day to day activities.
4.2.9   Understand TRIRIGA Purchasing Products (Purchase Requisitions, Purchase Orders, Receipts and Returns).
4.2.10   Describe how a technician receives, executes and completes a Work Task
4.2.11   Describe the role of Service Agreements within TRIRIGA maintenance

Reference:
https://www.ibm.com/support/knowledgecenter/en/SSFCZ3_10.6.0/com.ibm.tri.doc/common/t_ctr
_maint_ops_svcs.html

TASK: 4.3

TEST OBJECTIVE: Demonstrate an understanding of the TRIRIGA Facilities Condition Assessment process.

SUBTASK(S):
4.3.1   Describe how to set up an inspection schedule.
4.3.2   Explain the purpose of a Building System.
4.3.3   Explain the purpose of a Building System Item.
4.3.4   Explain the purpose of a Component Renewal.
4.3.5   Explain the purpose of an Opportunity.
4.3.6   Describe how Opportunity records contribute to the FCI score of a building.
4.3.7   Describe how and where maintenance deferral records reside in TRIRIGA.
4.3.8   Understand Opportunity remediation with ongoing corrective and preventative maintenance programs**.**
4.3.9   Describe the process of grouping multiple opportunity records and analyzing for planning purposes.
4.3.10   Describe the process of assessing opportunities and requesting funding.
4.3.11   Describe the relationship between Funding Requests and Programs, Capital Projects and Facilities Projects.
4.3.12   Understand how Opportunity Analysis is performed along with the intended output of the analysis process.
4.3.13   Describe how a Facilities Condition Assessment report is run and identify the key components which are used to determine a building's expected condition degradation in accordance with investment schedule.

Reference:
https://www.ibm.com/support/knowledgecenter/en/SSFCZ3_10.6.0/com.ibm.tri.doc/common/t_ctr
_maint_ops_svcs.html

SECTION 5 Environmental and Energy Management

TASK: 5.1
TEST OBJECTIVE: Understand the environmental Data Set-Up
Environmental and Energy Management

SUBTASK(S):
5.1.1. Understand the different emission factors and their importance.
5.1.2 Understand NERC regions and their relevance.
5.1.3 Explain the function of a weather station.
5.1.4 Describe the value of the EnergyStar integration to TRIRIGA.
5.1.5 Describe the role of check lists in support of environmental certification
5.1.6 Explain how meters can be set up and allocated throughout the building portfolio.

TASK: 5.2
TEST OBJECTIVE: Understand the execution of environmental reporting

SUBTASK(S):

5.2.1 Describe how the carbon calculator utility works.
5.2.2 Describe environmental logs and their impact within TRIRIGA
5.2.3 Describe the ability to drill down from a high-level map to building information to identify inefficient energy consumption.
5.2.4 Describe key concepts of greenhouse gas (GHG) reporting

TASK: 5.3
TEST OBJECTIVE: Understand the impact of environmental projects

SUBTASK(S):

5.3.1 Describe how environmental opportunities are used to deliver cost savings
5.3.2 Describe the opportunity analysis utility for prioritizing environmental projects.
5.3.3 Describe how an environmental opportunity can become the basis for generating a funding request.

TASK: 5.4
TEST OBJECTIVE: Understand and configure IBM TRIRIGA Building Insights
Understand key capabilities of TRIRIGA Building Insights

SUBTASK(S):
5.4.1.1. Watson IoT Platform Connection Services
        5.4.1.1.1. Understand connect and connect components
        5.4.1.1.2. Understand data storage w/ DB2

5.4.1.2. Building Semantic Model
      5.4.1.2.1. Understand function of semantic model
      5.4.1.2.2. Understand concepts adopted from BRICK open standard for building equipment and sensor data
      5.4.1.2.3. Understand elements within hierarchy model concepts for Building Insights
      5.4.1.2.4. Understand administration of model within admin user interface
5.4.1.3. AI Framework and OOTB models for energy
      5.4.1.3.1. Understand AI models and scoring elements leveraged within Building Insights (prediction and anomaly detection)
      5.4.1.3.2 Understand data requirements for OOTB models
      5.4.1.3.3 Understand baseline with Weather elements (sun radiation, humidity, dewpoint, temperature) as well as Forecast data
      5.4.1.3.4 Understand determination of Energy Wastage
5.4.1.4. Aggregation layer
      5.4.1.4.1 Understand function of aggregation layer
      5.4.1.4.2 Understand impact of semantic model definition to enable aggregation layer
      5.4.1.4.3. Understand Swagger APIs available for embedding into custom applications
5.4.1.5. Responsive Web App
      5.4.1.5.1 Understand navigation, visual elements of near real time and prediction elements, and user journey
      5.4.1.5.2 Understand Enterprise, Building, and Project navigation
      5.4.1.5.3 Understand Sections
      5.4.1.5.4 Understand Custom Card creation
5.4.2.   Define and create TRIRIGA Building Insights Semantic Model
      5.4.2.1 Create model from semantic model templates provided for Energy meters
      5.4.2.2 Create model from semantic model templates for Assets with energy feed as one parameter
      5.4.2.3 Load model within Admin UI of TRIRIGA Building Insights
      5.4.2.4 Validate load of model within Admin UI of TRIRIGA Building Insights
5.4.3.   Train TRIRIGA Building Insights AI Framework and OOTB Models
      5.4.3.1 Transform your energy consumption data to meet the requirements of TBI
      5.4.3.2 Load historical data via CSV in admin UI to facilitate training
      5.4.3.3 Validate successful load after six hours when AI model runs
5.4.4.   Configure Watson IoT Platform with devices for real time connectivity
      5.4.4.1 Create devices in IoT platform with same device names as defined in KITT model
      5.4.4.2 Setup real time connectivity of devices using gateway interface with building management system or energy meters
      5.4.4.3 Use logical interface via Platform to transform data needed to fit data requirements of AI models
      5.4.4.4 Configure storage of data
5.4.5.   Extend TRIRIGA Building Insights with RESTful interfaces and custom reasoners
      5.4.5.1 Embed in custom solution via Semantic layer APIs
      5.4.5.2 Embed in custom solution via Aggregation APIs (see Swagger docs)
      5.4.5.3 Defining custom Semantic model for unique cases
      5.4.5.4 Creating reasoners against custom semantic model

Reference:
https://www.ibm.com/support/knowledgecenter/en/SS4NWY/building-insights/admin/apis/rest-apis.html

TASK: 6.1

TEST OBJECTIVE: Understand the application Builder Tools

SUBTASK(S):

6.1.1.   Understand how navigation is configured in TRIRIGA
    6.1.1.1.   Understand Navigation Builder components
    6.1.1.2.   Understand Portal Builder   components
    6.1.1.3.   Understand Project Container impact on navigation
6.1.2.   Understand Report and Query capabilities
    6.1.2.1.   Understand how to build and configure reports and queries in My Reports
    6.1.2.2.   Understand how to build and configure BIRT reports
6.1.3.   Understand Data Modeling
    6.1.3.1.   Understand data model structure (e.g., Module vs BOs, etc.)
    6.1.3.2.   Create and configure Fields
    6.1.3.3.   Create and configure State Families
    6.1.3.4.   Create and configure Associations
    6.1.3.5.   Define Formulas
6.1.4.   Understand Hierarchies for navigation and data structures
    6.1.4.1.   Location
    6.1.4.2.   Organization
    6.1.4.3.   Geography
    6.1.4.4.   Classifications
    6.1.4.5.   Cost Codes
6.1.5.   Create Lists
    6.1.5.1.   Manual
    6.1.5.2.   Dependent
6.1.6.   Understand how to build and configure forms
    6.1.6.1.   Configure Form tabs and sections
    6.1.6.2.   Configure State families in forms
6.1.7.   Understand how to build and configure workflows
    6.1.7.1.   Understand workflow capabilities
    6.1.7.2.   Understand how workflows are triggered
    6.1.7.3.   Understand workflow task types
6.1.8.   Understand UX Framework / Perceptive Applications
    6.1.8.1.   Understand Model Designer
    6.1.8.2.   Understand Web View Designer
    6.1.8.3.   Understand delivered web components
    6.1.8.4.   Understand Model and View Designer
    6.1.8.5.   Understand Application Designer

Reference:
https://www.ibm.com/support/knowledgecenter/SSHEB3_3.6.0/com.ibm.tap.doc/pdfs/pdf_tap_appbuild.pdf?view=kc
Application Building for the IBM TRIRIGA Application Platform

https://www.ibm.com/support/knowledgecenter/SSHEB3_3.6.0/com.ibm.tap.doc/pdfs/pdf_tap_appbuild.pdf?view=kc

IBM TRIRIGA Application Platform Wiki

https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/IBM+TRIRIGA1/page/IBM+TRIRIGA+Application+Platform

IBM TRIRIGA UX Framework Wiki

https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/IBM%20TRIRIGA1/page/UX%20Framework

TASK: 6.2

TEST OBJECTIVE: **Understand application administration capabilities**
Understand the capabilities of TRIRIGA utilities

SUBTASK(S):
6.2.1.   Understand how TRIRIGA licensing works
      6.2.1.1. Understand how licensing controls access at the tool level
      6.2.1.2. Understand how licensing controls access at the module level
      6.2.1.3. Understand how licensing controls access at the business object level
      6.2.1.4. Understand how licensing controls access at the UX application level
      6.2.1.5. Understand how license files are managed
      6.2.1.6. Understand how licenses are assigned to users
      6.2.1.7. Understand how user license access can be viewed
6.2.2.   Understand how TRIRIGA Security Groups are managed
      6.2.2.1. Understand how security groups control access at the tool level
      6.2.2.2. Understand how security groups control access at the module level
      6.2.2.3. Understand how security groups control access at the form level
      6.2.2.4. Understand how security groups control access at the UX model level
      6.2.2.5. Understand how data access can be controlled through security
      6.2.2.6. Understand how security groups are assigned to users
      6.2.2.7. Understand how a security administrator can view a security group's access summary
6.2.3.   Understand how user authentication works
      6.2.3.1. Understand how a user profile is involved in user authentication
      6.2.3.2. Understand how native user authentication is managed
      6.2.3.3. Understand how single sign on technologies can be used to manage user authentication
6.2.4.   Understand key application administration and setup tools

Reference:

https://www.ibm.com/support/knowledgecenter/SSFCZ3_10.6.0/com.ibm.tri.doc/admin/t_ctr_admin.html

TASK: 6.3

TEST OBJECTIVE: **Understand configuration management**

SUBTASK(S):

6.3.1 Understand how to upgrade the TRIRIGA Application Platform

6.3.2 Understand TRIRIGA Object Migration
       6.3.2.1 Import and validation
       6.3.2.2 Comparison
       6.3.2.3 Handling conflicts
       6.3.2.4 Export
6.3.3 Understand how object labeling works

Reference:

https://www.ibm.com/support/knowledgecenter/en/SSHEB3_3.6.0/com.ibm.tap.doc/obj_migrate/c_obj_migration.html

SECTION 7 Architecture

TASK: 7.1
TEST OBJECTIVE: Understand the key difference between On-prem vs. SaaS Offering
Differentiate between Software as Service and Installation on-premise

SUBTASK(S):
7.1.1 Describe the differences in the software delivery and licensing for On-Prem vs SaaS
       7.1.1.1 – Define advantage/situations where you would use SaaS
       7.1.1.2 – Define advantages/situations where you would use On-Prem
       7.1.1.3 – List standard SaaS commonalities with On-Prem Solutions
7.1.2 Describe which components are available for customers for configuration or change
       7.1.2.1 – Define the implications of using TRIRGA Application builder in SaaS offering.
       7.1.2.2 – Which Environments are provided in SaaS.
       7.1.2.3 – List which Specific features / functionalities are excluded in SaaS offering.
7.1.3 Describe the applicable SaaS standards and security standards supported by IBM TRIRIGA SaaS offering
       7.1.3.1 – List and describe the iso standard which TRIRIGA SaaS has obtained
       7.1.3.2 – List and describe the security certification which TRIRIGA SaaS holds

Reference:
https://www.slideshare.net/AlexisGion/are-you-ready-to-make-the-leap-to-ibm-tririga-saas
https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/IBM%20TRIRIGA1/page/IBM%20TRIRIGA%20on%20cloud

https://www-01.ibm.com/common/ssi/cgi-bin/ssialias?htmlfid=WWS12353USEN&

TASK:7.2
TEST OBJECTIVE: Describe the different server components and their role within a TRIRIGA system configuration
Identify components in the TRIRIGA System Architecture and their function

SUBTASK(S):
7.2.1 List common components of a TRIRIGA installation

7.2.1.1 – Describe the IBM TRIRIGA Application Platform logical four-tier system

7.2.1.2 – Describe the supported architectures / platforms

7.2.1.3 – Explain where one might find a comprehensive listing for Software combinations

7.2.1.4 – Explain standard architecture in an IBM SaaS implementation

7.2.2 Explain Document Manager

7.2.3 Document TRIRIGA architecture

7.2.3.1 – Define the Database requirements

7.2.3.2 – Define the Application Server Requirements

7.2.3.3 – Define the HTTP Server requirements

7.2.3.4 – Define the Reporting Server requirements

7.2.3.5 – Define the Web browser requirements

https://www.ibm.com/support/knowledgecenter/en/SSHEB3_3.5.1/com.ibm.tap.doc/ins_overview/c_ovw_platform_architecture.html
https://www.ibm.com/support/knowledgecenter/en/SSFCZ3_10.6.0/com.ibm.tri.doc/docmgt/c_manag_doc.html

TASK: 7.3
TEST OBJECTIVE: **Describe the typical implementation environment configuration**

SUBTASK(S):
7.3.1 Determine the optimal configuration to support a client implementation environment through its lifecycle

7.3.1.1 – Describe a development configuration for TRIRIGA

7.3.1.2 – Identify a high availability configuration

7.3.1.3 – Describe the development process e.g. Dev, Test, UAT, Prod and related configurations

7.3.1.4 – Identify a configuration where IBM TRIRIGA Connector for Business with high traffic could be effectively deployed

Reference:
https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/IBM%20TRIRIGA1/page/System%20architecture%20and%20hardware%20considerations

TASK: 7.4
TEST OBJECTIVE: **Identify role of Administrator console for TRIRIGA**
Administering agents and processes

SUBTASK(S):
7.4.1.1 - Identify the Administrator Console purpose

7.4.1.2 - Describe Administering DataConnect jobs

7.4.1.3 - Describe where to administer logs files

7.4.1.4 - Describe Gathering troubleshooting data for IBM Support process

https://www.ibm.com/support/knowledgecenter/en/SSHEB3_3.5.3/com.ibm.tap.doc/adc_topics/t_ctr_administer_console.html

SECTION 8 Integration and Data Management

TASK: 8.1
TEST OBJECTIVE: **Describe the different types of integration**
Describe the intergration points available in TRIRIGA

SUBTASK(S): Describe purpose and appropriate use of Integration points

8.1.1 List and describe the integration points available in TRIRIGA
      8.1.1.1 Describe the differences between data integration, data migration and the use of Offline forms
8.1.2 – Describe the DataConnect process
8.1.3 – Describe IBM TRIRIGA Connector for Business Applications tool
8.1.4 – Identify TRIRIGA AutoCAD integration
8.1.5 – Describe the IBM TRIRIGA Connector for BIM solution
8.1.6 – Identify OSLC components used to prepare a new interface
8.1.7 – Identify appropriate usage for the TRIRIGA data load manager
8.1.8 – Describe TRIRIGA Data Integrator
8.1.9 – Describe TRIRIGA Connector for Esri Geographic Information System (GIS)

https://www.ibm.com/support/knowledgecenter/en/SSHEB3_3.6.0/com.ibm.tap.doc/product_landing.html

TASK:8.2
TEST OBJECTIVE: **Describe the connectors within TRIRIGA**
(Identify the connectors in TRIRIGA toolset)

SUBTASK(S):
8.2.1 List and describe prebuilt connectors within TRIRIGA
      8.2.1.1 – Explain the DataConnect staging table process
      8.2.1.2 – Describe IBM TRIRIGA Connector for Business Applications tool and where usage would be appropriate
      8.2.1.3 – Describe CAD and BIM integration, their purpose and touchpoints

8.2.2 List the connectors that require additional preparation
      8.2.2.1 – Explain how Error handling works in IBM TRIRIGA Connector for Business
Applications
      8.2.2.2 – Explain preparation required for using the OSLC components
      8.2.2.3 – Describe the Integration with IBM License Metric Tool

https://www.ibm.com/support/knowledgecenter/en/SSHEB3_3.4.0/com.ibm.tap.doc_3.4.0/con_overview/c_ctr_connectors.html

https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/16665262-0aef-427f-8fa8-dcfcc66a26ff/page/7b59e1ba-35b8-4825-ada9-1894a29fc023/version/a83fdb0f-25d9-413d-b5e2-4a54d0692ba5

https://www.ibm.com/support/knowledgecenter/en/SSHEB3_3.4.0/com.ibm.tap.doc_3.4.0/con_overview/c_ctr_connectors.html

https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/16665262-0aef-427f-8fa8-dcfcc66a26ff/page/7b59e1ba-35b8-4825-ada9-1894a29fc023/version/a83fdb0f-25d9-413d-b5e2-4a54d0692ba5

Next Steps

1. Take the IBM Watson IoT TRIRIGA Solutions Architect V1 assessment test.

2. If you pass the assessment exam, visit pearsonvue.com/ibm to schedule your testing sessions.

3. If you failed the assessment exam, review how you did by section. Focus attention on the sections where you need improvement. Keep in mind that you can take the assessment exam as many times as you would like ($30 per exam), however, you will still receive the same questions only in a different order.