**402 – Cloud Solutions**

# Section 1: Foundational Cloud Concepts

**Compare and contrast the various cloud business models and technologies**

<https://support.f5.com/csp/article/K14826>

<https://support.f5.com/csp/article/K14810>

<https://wtit.com/f5-good-better-best-licenses/>

**Apply concepts related to cloud Identity Access Management technologies**

**Describe the terminology, modules, and technical requirements related to application bursting and mobility**

**Apply concepts related to application bursting and mobility**

<https://www.youtube.com/watch?v=dDehuhrIE-c>

<https://www.f5.com/cloud/pricing#container1989174610>

# Section 2: Cloud Infrastructure Design

**Describe the F5 licensing and support characteristics for cloud deployments**

<https://clouddocs.f5.com/cloud/public/v1/licensing/licensing.html>

<https://clouddocs.f5.com/cloud/public/v1/matrix.html>

**Evaluate variables relevant to the design of a cloud solution that meets business requirements**

**Enumerate the available permutations and combinations of F5 virtualization technologies**

**Recognize the constraints imposed by various SDN technologies on F5 components**

**Relate technical requirements to F5 platforms and virtualization techniques**

**Evaluate variables relevant to architecting solutions using single and multi-tier F5 products in various cloud environments**

**Evaluate the variables relevant to the design of green-field data centers and application delivery architectures to function as a cloud service provider**

**Apply key concepts related to the design on-demand provisioning of application services**

**Evaluate variables relevant to the design of on-demand provisioning of application services**

# Section 3: Cloud Migration

**Evaluate variables relevant to the creation and validation of a Cloud migration plan for applications**

<https://aws.amazon.com/blogs/enterprise-strategy/6-strategies-for-migrating-applications-to-the-cloud/>

**Apply key concepts required for the implementation of a Cloud migration plan for applications**

**Evaluate variables relevant to the implementation of a cloud migration plan for applications**

**Apply key concepts required to leverage technologies to integrate with various SDN environments**

**Evaluate variables relevant to the leveraging of technologies to integrate with various SDN environments**

# Section 4: Cloud Deployment

**Analyze cloud service provider instance sizing and location as it relates to BIG-IP requirements**

<https://clouddocs.f5.com/cloud/public/v1/aws/AWS_download.html>

**Apply the key concepts required to deploy F5 instances on a cloud infrastructure**

<https://clouddocs.f5.com/cloud/public/v1/aws_index.html>

<https://clouddocs.f5.com/cloud/public/v1/matrix.html>

# Section 5: Cloud Orchestration and Automation

**Apply the N/E/S/W-bound API model in order to orchestrate service creation**

<https://community.f5.com/t5/technical-articles/wils-the-data-center-api-compass-rose/ta-p/283999>

**Apply the key concepts required to automate and orchestrate using F5 RESTful APIs**

<https://f5-automation-labs-jt.readthedocs.io/en/latest/module1/lab7.html>

<https://clouddocs.f5.com/api/icontrol-soap/Authentication_with_the_F5_REST_API.html>

<https://clouddocs.f5.com/api/icontrol-rest/>

**Evaluate the variables relevant to automation and orchestration using F5 RESTful APIs**

<https://cdn.f5.com/websites/devcentral.f5.com/downloads/icontrol-rest-api-user-guide-14-1-0.pdf>

<https://clouddocs.f5.com/products/extensions/f5-appsvcs-extension/latest/userguide/http-methods.html>

**Apply the key concepts required to design a cloud bursting solution**

<https://www.f5.com/services/resources/white-papers/the-f5-cloud-bursting-reference-architecture>

**Evaluate the variables relevant to design a cloud bursting solution**

<https://community.f5.com/t5/technical-articles/cloud-bursting-what-you-need-to-know/ta-p/274685>

<https://community.f5.com/t5/technical-articles/cloud-bursting-the-hybrid-cloud-and-why-cloud-agnostic-load/ta-p/276565>

**Determine how to utilize cloud deployment templates to create on demand provisioning of application services**

<https://clouddocs.f5.com/cloud/public/v1/aws_index.html>

<https://clouddocs.f5.com/cloud/public/v1/azure_index.html>

**Evaluate cloud deployment templates for the creation of on-demand provisioning of application services**

**Apply the key concepts required to create a workflow for dynamic provisioning of an F5 instance**