Node-RED Cloud Applications

Quiz, 5 questions

Congratulations! You passed!

Next Item

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1.

Which of these activities is not suitable for a Node-RED application deployed in the cloud

- [ ] Using a node that is cloud aware and retrieves its configuration from environment variables

Un-selected is correct

- [x] Calling an API using the http request node with all the service details set in the node configuration

Correct

Storing configuration with the flow makes it difficult to move an application between environments. There should be clear separation between code and configuration.

- [ ] Configuring a cloud storage service, but modifying the Node-RED run time to get the service details from the settings config file rather than storing them in the node configuration

This should be selected

- [x] Adding a function node, which has the JavaScript code in the configuration of the node

This should not be selected

This is a valid scenario for a cloud deployment as the function node configuration is part of the application code and won't differ between environments, so should be stored in the flow.

You still need to be aware that configuration (constants) should not be included in the function code, such as addresses of web services.

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1 point

2.

During cloud automated operations, which of these ways of persisting information could result in lost data

- [ ] using a cloud based NoSQL database service

Un-selected is correct

- [ ] using a SQL database service bound to the Node-RED application running on the IBM Cloud

Un-selected is correct

- [x] using file nodes in Node-RED

Correct
The files nodes use the local file system to store data, so during a scaling or recovering from a fault an application instance may be removed, which deletes the local storage, loosing all files contained on the storage.

- [ ] using a remote cloud storage service, such as Amazon S3

Un-selected is correct

- [x] using Node-RED global context

Correct
Currently the global context object is an in memory store, where each application instance keeps a private version of the global context object, so if an application instance is removed during a scale down operation, then the data in the global context object in that instance is lost.

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3.

You need to call a cloud service in your application. How should you store the service calling details (web address, credentials, etc) to ensure you have an application that can be hosted on a cloud environment?

- [x] Use a service specific node that is cloud aware and select the cloud configuration option to automatically pick up the configuration from the cloud runtime.

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Correct
Yes, cloud aware nodes will automatically get the required configuration from the runtime, which will be automatically set by the cloud automated processes when the application starts.

- [x] Expect the configuration to be made available as configuration by the cloud environment, then use the data in the environment variables to prepare the calls to the service.

Correct
Yes, cloud platforms use environment variables to make environment specific configuration available to applications.

- [ ] Use a service specific node from the Node-RED flows catalog that stores service configuration in the node config

Un-selected is correct

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1 / 1 point

4.

Which of these best describes a cloud native application

- An application that uses local storage to hold uploaded images to ensure cloud storage costs are kept to a minimum
- An application that uses an in memory store to ensure the quickest possible response to the end user
- An application that holds state in the http session and configures sticky sessions to ensure the client always returns to the correct application instance running in the cloud
- (•) An application that holds no local state but uses a cloud storage service to hold any state

Correct
Yes, a cloud native application should be stateless, so no data is persisted within the application runtime, but uses a shared storage service, ensuring all instances of the application will return the same result and the loss of an application instance will not loose any data.

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5. When connecting to a social media site using Node-RED in an application destined for deployment on a cloud infrastructure, which of the following could be a concern?

- Messages will arrive too fast for the application to process
- The messages will be too long for the node to put in the message object
- A single message could be processed multiple times

Correct

Yes, unless the node or API specifically handles multiple instances of the same application connecting to the service, then each connection could receive all messages, resulting in duplicate messages being processed.