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## Understanding about Horizon Dashboard.

A web-based interface called the Horizon Dashboard is intended to give managers and users a centralised view of their OpenStack implementation. A big, scalable private cloud and public cloud can be built and managed using the open-source cloud computing platform known as OpenStack. An key part of OpenStack, the Horizon Dashboard offers a graphical and user-friendly interface for managing cloud resources like virtual machines, pictures, and networks.

Users can launch new instances, manage current instances, manage pictures, manage networks, manage projects and users, as well as keep track of how cloud resources are being used, using Horizon. Administrators can easily customise the Horizon Dashboard to match their own requirements and offer a distinctive user experience thanks to the plugins and themes that are available for customisation.

User management is one of the Horizon Dashboard's main functions. Administrators can manage users, projects, roles, and quotas in Horizon, which gives them the power to manage who has access to what resources and at what levels. For the cloud resources to be utilised properly and efficiently, this is crucial.

Image management is another essential component of Horizon. For managing pictures, which are snapshots of virtual machine instances, Horizon offers a graphical user interface. Users can launch instances from them, manage already-existing images, and upload new images. As a result, managing and deploying virtual machine instances in a predictable and controlled manner is simple.

Horizon offers network administration features in addition to picture management. Network development, maintenance of already-

existing networks, and IP address assignment are all functions that administrators have control over. This gives administrators the ability to manage network configurations and guarantee efficient use of network resources.

Another significant element of the Horizon Dashboard is instance management. Users have the ability to start, stop, and reboot instances, control instance metadata, and launch, manage, and terminate instances. As a result, managing and maintaining virtual machine instances is simple, resulting in their efficient and effective operation.

Another essential component of Horizon is monitoring. Real-time monitoring of cloud resources like virtual machines, pictures, and networks is provided by the Horizon Dashboard. This makes it possible for managers to monitor resource utilisation and spot potential problems right away, ensuring that cloud resources are used effectively and efficiently.

Horizon Dashboard offers additional functionality through plugins in addition to its primary capabilities. These plugins can be used to increase the Horizon Dashboard's capability, letting administrators add additional features and functionalities as necessary. Because of this, the Horizon Dashboard is incredibly versatile and easy to modify to suit the changing requirements of administrators and users.

The Horizon Dashboard is a strong tool for controlling and keeping an eye on OpenStack deployments overall. It lets users and administrators to efficiently manage and control virtual machines, images, and networks by giving them access to a centralised and user-friendly interface for managing cloud resources. The Horizon Dashboard is a crucial part of every OpenStack deployment due to its adjustable features and plugin-based architecture, which make it a highly versatile and adaptable tool for cloud management.