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(54) Title: UPGRADE OF HIGHLY AVAILABLE FARM SERVER GROUPS

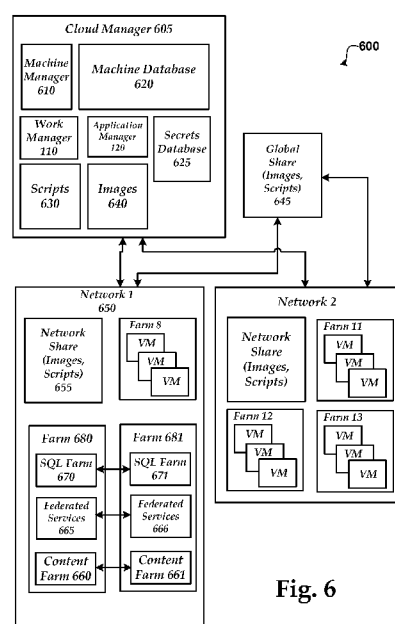


Fig. 6

(57) **Abstract:** A machine manager controls the deployment and management of machines (physical and virtual) for an online service. Multi-tier server groups are arranged in farms that each may include different configurations. For example, their may be content farms, federated services farms and SQL farms that are arranged to perform operations for the online service. When the multiple farms are upgraded, new farms are deployed and the associated content databases from the old farms are moved to the newly deployed farms. During the upgrade of the farms, requests may continue to be processed by the farms. The farms may be automatically load balanced during an upgrade. As content becomes available on the new farm, requests for the content may be automatically redirected to the new farm.



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