Registry Hosted Backup of the SEER*DMS Database

As you know, IMS leases space in two co-location facilities to host SEER*DMS. These datacenters are 60 miles apart and located in Sterling, VA and Baltimore, MD. Washington DC is directly in the middle of these two facilities. Each registry has primary operations in one of the facilities, and a backup of all data in the other.

While very unlikely, it is possible that a natural or human influenced disaster could destroy both datacenters and consequently your registry's data. Also unlikely, but possible, an adversary could get inside IMS and destroy or corrupt both copies of a registry's data. There is a firewall between the primary and backup copies of data. But there is not an "air gap", that is, the two data centers are not completely isolated from each other, there is a network connection between the two.

Even with the low risk defined above, IMS recommends that each registry self-host a third copy of their entire Postgres database. IMS has implemented a mechanism to facilitate this solution. The database is packaged daily into a single tar file which can be transferred to your facility on a scheduled basis. Each registry can define a schedule that is comfortable for them.   IMS does not recommend daily transfers, but it is possible to do so.

The file will be a Postgres file system level backup as described here: https://www.postgresql.org/docs/9.5/static/backup-file.html. It will require expertise in Linux and Postgres to make use of this material.   IMS will provide technical support if it becomes necessary to use the backup file.

The file will be transferred to your facility via the existing VPN using SFTP/SCP/SSH.   Registries with a site-to-site VPN are at a distinct advantage for automating this due to the VPN's 24/7 nature.   Registries that use client-to-site VPN will need to manually transfer the backup to their location.   However, IMS is evaluating methods to streamline the backup process in the future. For example, IMS is considering ways to encrypt the tar file so it can be transferred over the generic Internet, or potentially stored in the cloud or at another registry.   These options will be discussed in future CCB meetings; no new solutions will be implemented without involving all registries in the decisions and no registry data will ever be transferred without registry consent.

If you would like to self-host another backup copy of your SEER*DMS Postgres database then please contact Scott Depuy and/or Linda Coyle directly.