Multitier Data Staging Solution for Indian Meteorology Department

SYNECTIKS

The Ask?

Can you help us to staging of huge data without any application changes?

Request

Need a solution to stage large volume of Satellite Data Staging in multi tired storage as per customers configurable SLA (if capacity > 70% move to next tier). The Application server should find automatically the data in case they are staged to a next tier. The solution should be lightweight, simple, and open.

The Answer:

Script based data staging solution that requires minimal changes at application layer.

Challenges:

It should be Lightweight script based that can be Integrated in their existing application environment (Java Based Image processing UI). It should do Multi staging data protection(D2D2T). The backup storage should be based on Scale out Low cost NAS storage. The solution should have a small TCO.

Solution:

We used alfresco content management solution to store all the file. Alfresco has a content aggregation feature that allow to search for multiple folder for content. We mapped the different tiers of storage to different folder and wrote automation script that checks periodically the capacity of primary storage and move data to secondary based on some rule. We integrated the original data processing application with Alfresco API, to store and access the data.Alfresco access API ensured that files are access seamlessly even though they move from one tier to another tier.

ROI/TCO :

It helped them to save cost on primary storage by 50%. The solution helped to reduce 90% operations job of moving data in different storage tiers.