**Dayton Production: Engineering Village Logical Architecture Diagram:**

To ensure your applications are always fast, secure, and available, the BIG-IP “Load Balancer” is used, which means that the traffic is routed through BIG-IP Load Balancer. Customers access Engineering Village via http; encryption is handled by the F5 load balancer. The load balancer handles users’ connections to Internet-facing virtual servers and transparently redirects them to redundant sets of internal application servers. EV sessions are stateful. The State is preserved within a session through the use of cookies in the user’s web browser.

Data about the session (IP address, Type of Browser, Username, Password, history, navigation, and preferences) are stored in the database through “Usage application server” and the “log service”, which then used to generate reports. The Application uses Scopus webservice to fetch information about “cited by” counts” (searchCiteByEID) and to get the cited articles.

Access to EV is controlled by allowed IP-Ranges and/or username/password and/or Shibboleth and/or Athens Authentication.



**CERT: Engineering Village Logical Architecture Diagram:**



**General Engineering Village Logical Architecture Diagram & Services:**

**Engineering Village uses** some services:

1. **Controller Service:** gets the session information, then back to the log service to save the information in the log
2. **Session Service:** maintains the session information
3. **Log Service:** Saves log information into the database for creating and maintaining reports
4. **Data Service:** connect to the database server to fetch the data for the specified Query using the “Doc id”, and partial data that returned from FAST Indexed, then generates XML files; which then uses XSL files; to generate HTML page back to the user (Browser).
5. **Citedby Service:** The application uses a Scopus webservice to get information about “cited by” counts” (searchCiteByEID) and to get the cited articles.
6. **Emailalerts Service:** EV also supports Email Alrets Service to send weekly-basis E-mail alerts for the subscripted users for the new uploaded data.

Traffic is maintained by F5 BIG-IP Load Balancer



**EV Technology Stack Diagram**

Books Data (Pdf (s), Images, etc.) are stored in WOBL Directory under Network File System (NFS) as in the diagram below



**Data Fabrication Diagram (Data Loading/Correction)**

