**Training Plan – Project Engineer for airport.**

**General training:**

1. Understanding baggage handling system and its key modules.

Go through the below link to understand baggage handling system and its key modules. It contains videos and documents related to baggage handling system.

<https://vikipedia.vanderlande.com/pages/viewpage.action?spaceKey=WWE&title=Carousel+C+-+Baggage+Handling>

**Laptop Setup -**

1. Install Below software from application catalog -
   * IBM/HP Tool Suite
   * PL/SQL Developer
   * SQL Developer
   * SnagIT
   * Beyond Compare

**BHS Tool training:**

1. Synergy (must)
2. Change (must)
3. Doors (not required for first project)
4. Smarteam (partially required)

**Go through below links understand above tools -**

<https://vikipedia.vanderlande.com/display/ICT/SynergyCM+client>

<https://vikipedia.vanderlande.com/display/ICT/WI+-+Change+Synergy+-+How+To+Use>

<https://www.youtube.com/playlist?list=PLZGO0qYNSD4W7Pq7n_bd33wchFV3O_d4Y>

<https://www.ibm.com/support/knowledgecenter/SSRNYG_7.2.0/com.ibm.rational.synergy.prodoverview.doc/topics/s_c_po_get_start.html>

**Oracle and PL/SQL training -**

Go through Oracle and PL/SQL concepts like -

1. Oracle services.
2. Oracle TNS.
3. Oracle Schema objects.
4. Packages
5. Data Modelling
6. DBMS\_JOBS
7. How to compile invalid jobs in oracle
8. How to check time zone in oracle system
9. How to grant objects to another schema
10. How to create synonyms? What is the use of synonyms?
11. How to debug PL/SQL code?
12. What is transaction management in DBMS?
13. How to use pragma autonomous transaction in oracle?
14. How to run a procedure or package of PL/SQL?
15. Create your own package with XML/XSD/XSLT file handling.

**Messages that are exchanged in between SAC and other low-level components (PLC, HSC, HBS, ATR, etc.) -**

1. <PackageRegister> (From PLC to SAC)
2. <PackageInstruction> (From SAC to PLC. Default destination)
3. <PackageReport>

<ScreeningResult> (From PLC to SAC. Screening information)

1. <TrackingReport> (From PLC to SAC. When bag is diverted)
2. <IdChange> (From HSC to SAC)
3. <TrackingReport>

<TrayNo> (From HSC to SAC)

1. <PackageReport>

<ScanResult>

<Barcode> (From ATR to SAC)

1. <PackageInstruction> (From SAC to HSC. Final destination)
2. <TrackingReport> + <PackageReport> <Arrival> + <DeRegister> (From HSC to SAC)

**SAC/VIBES Specific training to:**

1. Understanding SAC/VIBES product(s) in detail.

1. Understanding VIBES messages and its standards, and overview about System baseline.
2. VIBES message flow.
3. Internal interfaces surrounding SAC (BSIS/BPI/MCS/BRS/ECSp/HSC)
4. SAC external interfaces (DCS / FIS)
5. System and HLC components requirement understanding.
6. SAC detail-design understanding
7. SAC, BSIS, MCS project configuration
8. Project installation
9. HLC test case creation and project testing.

**BHS IT related training:**

1. SAC Nodes and Database details.
2. How to work with Cluster
3. Service dependency’s
4. BHS Network
5. DNS
6. LDAP and LDAP user management
7. Firewall for external communication
8. Workstation configuration (SAC/MCS/SCADA)

**Below the details for Ercan Virtual Machine:**

Ercan VM: 172.27.9.100

Username: Administrator

Password: IkbenVanV1.nl

**After accessing the VM you can find**:

Installed CM at - D:\CM folder

BSM simulator at - S:\BSM

Software installer at - P:\VI\_SE

P:\BSIS

P:\CMs

Logs at - Logs (L:) drive

To send the messages we can use HttpClient-0.1-jar-with-dependencies.jar application.

All the sent messages and SAC response messages can be seen in messages.xml log file.

We can also verify the sent message in bag overview tab in SAC GUI.

**Log in into SAC GUI:**

Before signing in SAC GUI we need to update the C:\Windows\System32\drivers\etc\hosts.txt file by adding below entries in it-

172.27.9.100 SAC

172.27.9.101 mhs.lan

(You should now be able to ping SAC from command prompt now.)

Open the below URL in browser - http://sac/sacgui/

Enter username/password as - supervisor/Super!visor1

**To Send BSM -**

* Go to S:\SITA\_Simulator\_BSM and start run-xml.bat service

Edit the S:\SITA\_Simulator\_BSM\queues\normal.txt for BSM message.

Then copy this normal.txt file in S:\SITA\_Simulator\_BSM\queues\BM\_Server folder. This file will be automatically read by SAC.

* The received BSM message can be seen in (L:\CM\_MDS\messages.xml, L:\CM\_BSIS\_NP\messages.xml file, L:\CM\_SE\_BSIS\messages.xml)

Messages from PLC can be seen in L:\CM\_SE-MPV\messages.xml

Messages from sorter can be seen in L:\CM\_SE-SORTER\messages.xml

* The normal.txt file contains details like fight details, date, LPN, etc.

E.g. -

.N/0700000050 001 => here LPN is of just 10 digits. Last three digits will decide how many BSM messages to be sent.

* The flow of BSM is as follows -

From SITA simulator S:\SITA\_Simulator\_BSM\queues\BM\_Server\normal.txt the BSM will be read by CM\_MDS -> BSIS Database -> CM\_BSIS\_NP -> CM\_SE\_BSIS -> DS\_APPL (SAC DB) -> SAC GUI

* If we make any changes in SAC, then we need to run P:\SE\SAC\_GUI\publish.cmd as
  + Administrator. After this the applied changes will be reflected in SAC GUI.
* To install and uninstall the DS\_APPL database (SAC DB) run P:\SE\Install\_All.cmd and P:\SE\Uninstall\_All.cmd as administrator.
  + (You can restart CM services before starting the SAC application.)
* When we send PackageRegister message we need to send LIC in the message. SE will response with PackageInstruction message and it will send a PID for the associated LIC. We can check for this message in L:\CM\_SE-MPV\messages.xml. We need to use this same PID for the rest of the messages.

After sending a message we can verify it in SAC GUI.

* In DS\_APPL.VIU\_INFO\_LOGS table we can check for the error logs.

DS\_APPL.HCL\_SEND\_MESSAGES contain BPM information.

DS\_APPL.HCL\_RECEIVE\_MESSAGES contain BSM information.