**Schedule Adherence Problem Statement:-**

**Terminologies:-**

**1)User :- Employees**

**May Work for Different WorkGroup without Overlapping**

**Belongs to one Site**

**Have Two Types of Schedules**

**1)Planned Schedule**

**2)Actual Schedule**

**2)Interval :-Interval**

**Work/Lunch/Break**

**Deviation need to be calculated separately at Work/Lunch/Break.**

**3)Site :-Del/Hyd/Blr**

**Can have many WorkGroups not necessarily all**

**Deviation of Site is total deviation of all user present at given site.**

**4)WorkGroup:-Mail/Message/Call**

**Work Group must be same both in planned and actual schedule.**

**5)Planned Schedule**

**6)Actual Schedule**

**7)Deviation :-User/Site/WorkGroup/Interval level**

**8)Duration:-Daily/Weekly/Monthly**

**9)UnderCapacity: Less users are present actually than Planned.**

**10)OverCapacity :**

**More users are present atually than planned.**

**Leads to deviation same as of undercapacity.**

**Note:-If overcapacity and undercapacity are created at same time they can be nullified.**

**Architecture**

**Input File- Planned File and Actual File**

**Type of input file :-**

**UserId StartTimeStamp EndTimeStamp Site WorkGroup Type**

**Output File-On request and real time**

**on real time 12 output files will be generated having different report level and duration.**

**Each file a continuous data over a period of time.**

**on request output a single output file will be generated .**