## EFM Summary EFM (Ethernet in the First Mile)

EFM is a solution for customers who wish to connect using DSL with speeds more than 2 Mbps. The physical connections is done using copper cabling in point-to-point network at speed of 2 Mbps, we can use from one to eight DSL lines, the DSLAM will bond them in one bonding group so that they would operate as one DSL line

The first mile, is the link between the end user and the public network. It is the communications infrastructure of the office building, hotel or company. Essentially, the first mile is a figure of speech for the link from the subscriber or user to the network; therefore, it may be greater or less than a mile   
Modems used -> Hattras, Zhone   
DSLAM -> Paradyne, Zhone (needs to install EFM Card) or Zyxel (SHDSL card can operate as EFM)   
  
  
  
**EFM configuration on DSLAM**

- For Zhone DSLAM, check the below link.  
  
 [http://wiki.noor.net/](http://wiki.noor.net/Consumers/ADSL_prov/Projects/ScriptDifferentspeed)[Shared\_resources/ETS2/Docs/**EFM**\_solution\_using\_Zhone\_DSLAM](http://wiki.noor.net/Shared_resources/ETS2/Docs/EFM_solution_using_Zhone_DSLAM)

- For Zyxel DSLAM, check the below link.  
  
 [http://wiki.noor.net/](http://wiki.noor.net/Consumers/ADSL_prov/Projects/ScriptDifferentspeed)[Shared\_resources/ETS2/Docs/**EFM**\_solution\_using\_Zyxel\_DSLAM](http://wiki.noor.net/Shared_resources/ETS2/Docs/EFM_solution_using_Zyxel_DSLAM)  
   
   
 **EFM modems configuration** A- For Zhone modem, check the below link.  
  
 [http://wiki.noor.net/](http://wiki.noor.net/Consumers/ADSL_prov/Projects/ScriptDifferentspeed)[Enterprise/TAM/Docs/HOWTOs/**EFM**\_modem\_config\_and\_troubleshooting](http://wiki.noor.net/Enterprise/TAM/Docs/HOWTOs/EFM_modem_config_and_troubleshooting)  
  
  
 B- For Zyxel modem, check the below link.  
  
 [http://wiki.noor.net/](http://wiki.noor.net/Consumers/ADSL_prov/Projects/ScriptDifferentspeed)[Enterprise/DSL/Documentation/HOWTO\_Configuring\_Zyxel\_792\_  
 793\_as\_**EFM**\_modem\_router\_and\_bridge](http://wiki.noor.net/Enterprise/DSL/Documentation/HOWTO_Configuring_Zyxel_792_793_as_EFM_modem_router_and_bridge)

C- For Hatteras modem, check the below link  
   
 [http://wiki.noor.net/](http://wiki.noor.net/Consumers/ADSL_prov/Projects/ScriptDifferentspeed)[Enterprise/TAM/Docs/HOWTOs/Hatteras\_**EFM**\_modem](http://wiki.noor.net/Enterprise/TAM/Docs/HOWTOs/Hatteras_EFM_modem)  
   
 Note: to use Hatteras as modem/router you have to create key as shown below.  
  
 Example: HN404-CP# create key 4BXPT-TR85X-CUQD7-UGPNX-PLQD7 keyNo 1   
  
 to get this key, check the below link which contain the serial number of the modem and the   
 corresponding key for each one.

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 **Testing EFM solution using Hatteras EFM modem**   
  
 -to see the facts and suggested best Practice when using Hatteras modem, check the below link  
  
 [http://wiki.noor.net/](http://wiki.noor.net/Consumers/ADSL_prov/Projects/ScriptDifferentspeed)[Shared\_resources/ETS2/Docs/Testing **EFM** solution using Hatteras **EFM** modem](http://wiki.noor.net/Shared_resources/ETS2/Docs/Testing%20EFM%20solution%20using%20Hatteras%20EFM%20modem)