LAN Emulation at the ATM Forum

Keith McCloghrie
cisco Systems

What is LAN Emulation ?

LAN Emulation provides for:

- all existing LAN applications to run over ATM,
- the use of ATM as a backbone to interconnect existing "legacy" LANs,
- the interconnection of ATM-attached servers/workstations to each other and to those on "legacy" LANs,
- multiple Emulated LANs which are logically separate, to use the same physical ATM network

Non-Goals

LAN-Emulation will not:

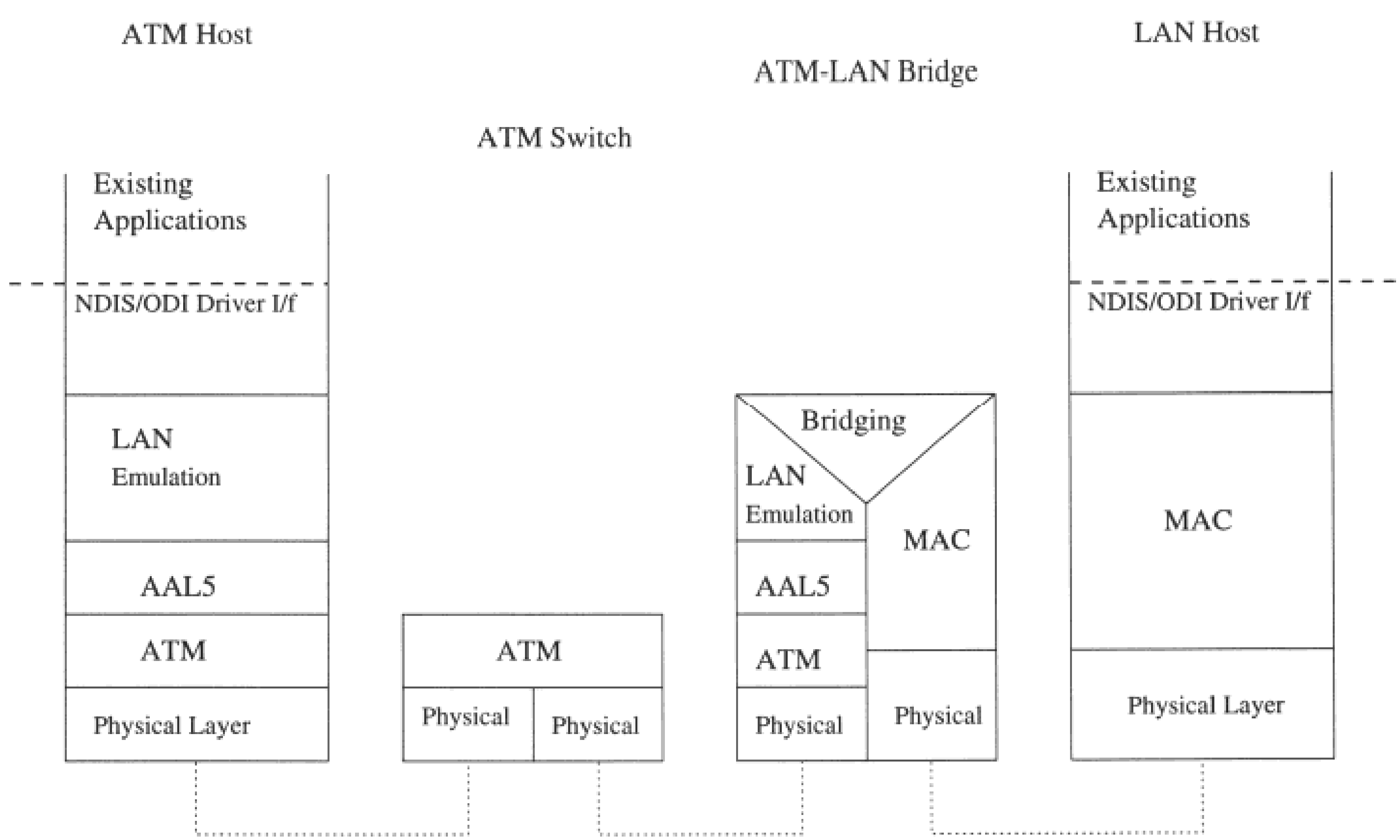
- solve existing Ethernet/Token Ring/FDDI bridging problems
- allow a station to receive all frames on a logical LAN
- support existing MAC-layer protocols. e.g., SMT/Token Management

Disclaimer

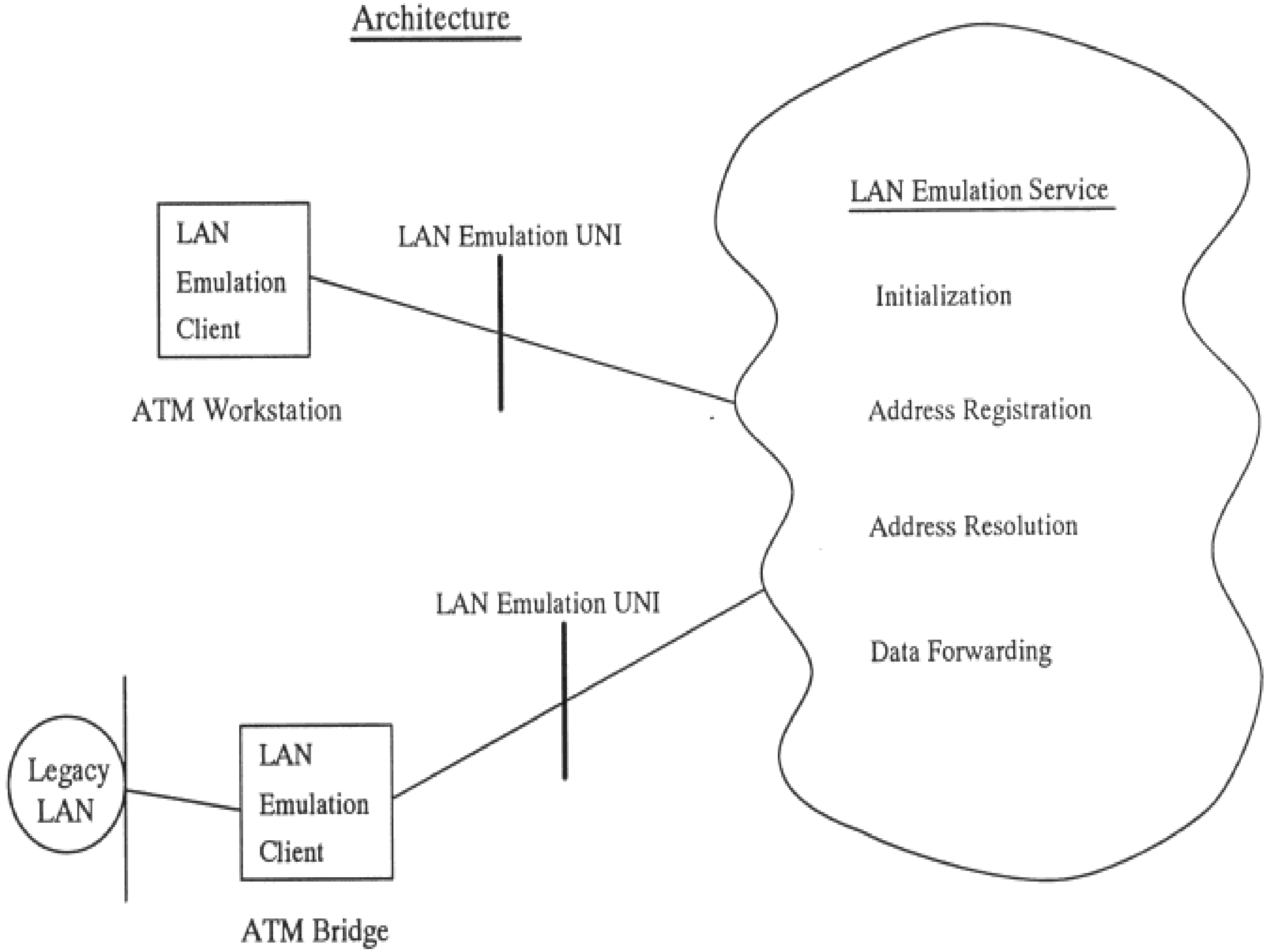
LAN-Emulation is "work in progress".
The ATM Forum's LAN-Emulation SWG:

- has reached agreement on some issues,
- but not on others.
- even the current agreements may yet change.

LAN Emulation Protocol Stack



Architecture



LAN Applications

The advantage of LAN Emulation is that

• the use of ATM is hidden from the applications

The disadvantage of LAN Emulation is (also) that

• the use of ATM is hidden from the applications