InfiniBand Management

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LANE 15
SOFTWARE

Lane15 Company Background

Mission: To be the industry leader for InfiniBand™ management software

- Founded – Q1 2000 in Austin, Texas
- Product Milestones – Developers Edition
- Industry Milestones – Interoperability
- InfiniBand Trade Association – Active Participation
- Investors Include

Intel Capital   COMPAQ   DELL

AustinVentures   Lightspeed   AV LABS
IGNITE YOUR VENTURE

Components of InfiniBand Management

- Managers
  - Subnet Manager
  - Performance Manager
  - Baseboard Manager
  - Vendor Manager
  - SNMP Tunneling Manager
  - Device Manager
  - Application Manager

- User Interface
  - Integrated with existing management tools
  - Diagnostics
  - Extensible

- Agents
  - Subnet Management Agent
  - Performance Management Agent
  - Baseboard Management Agent
  - Communications Management Agent
  - Vendor Agent
  - SNMP Tunneling Agent
  - Device Management Agent
  - Application Management Agent

Defined by the:
The InfiniBand Specification version 1.0.a
www.InfiniBandta.org

Lane15 UML-Based Development Approach

- Enumerate use cases
  - Rational Rose (UML)
  - 1300+ and counting
- Prioritize features
  - Product partitioning
  - Partner input
- Define architecture as objects
  - Attributes
  - Operations
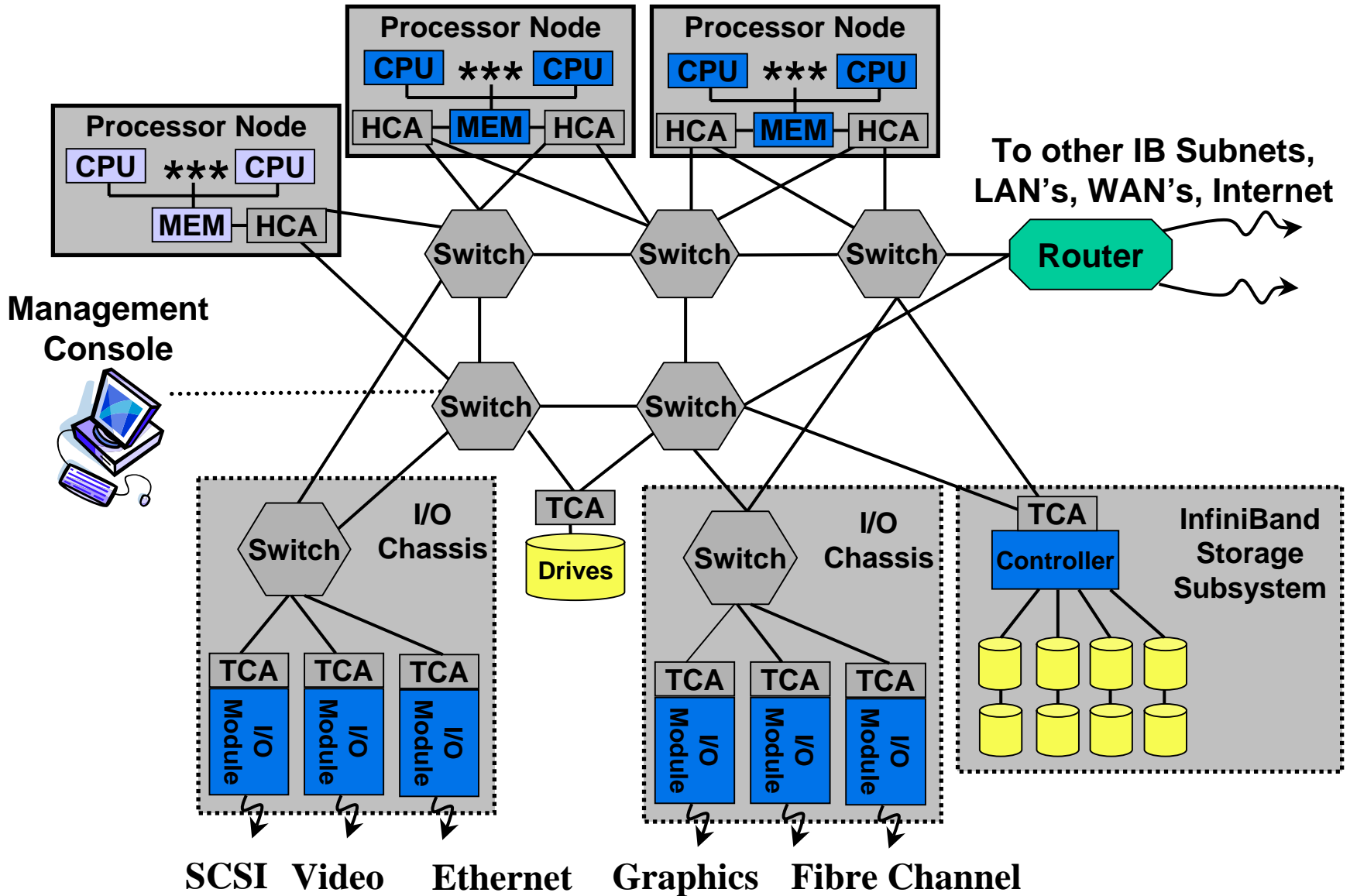 - Relations
- Implement architecture

Benefits

- **Customer centric**
- **Cleaner interfaces**
- **Less overall resources**
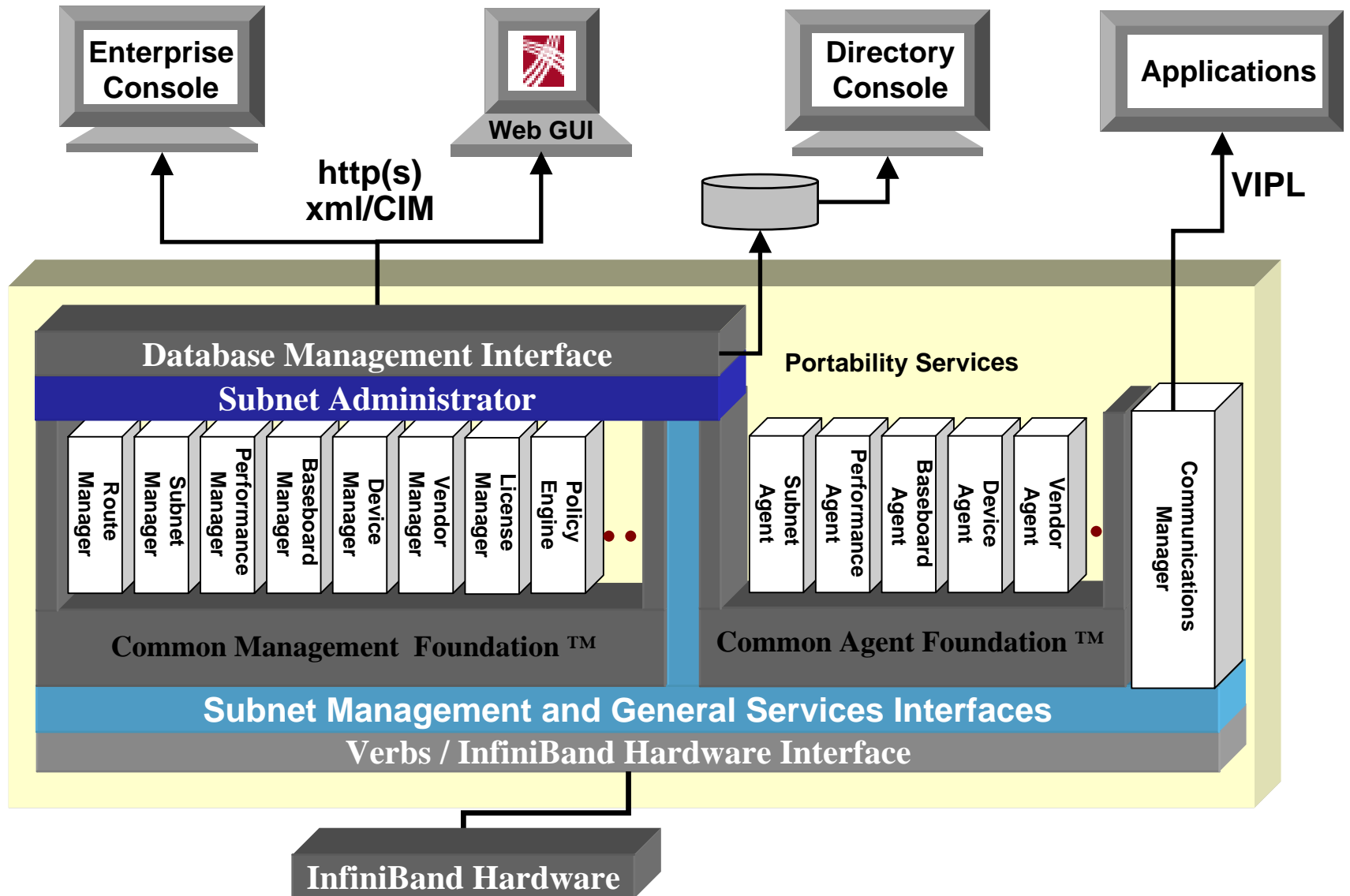- **Prioritized features**
- **Portability**

"Foundation for Growth"

"Platform for Extensibility"

InfiniBand Switched Fabric

Lane15 Product Architecture

Fabric Comparison

Characteristic	Fibre Channel	TCP/IP Ethernet	InfiniBand
Bandwidth Characteristics	1 & 2 Gbps Available; 10 Gbps in development	1 Gbps Available; 10 Gbs development	2.5, 10, 30 Gbps in development
Network Management	Out of Band on Separate Network	In Band using SNMP	In Band; includes hardware diagnostics
RDMA Support	Yes	No	Yes
Auto Discovery & Configuration	Vendor-dependent	No	Yes
Service Advertise & Lookup	No	No	Yes
Software Overhead at Server	High	Very High	Low
Density/Cabling	Medium	Low	High
Intrinsic Partitioning	Vendor-dependent	No	Yes
Intrinsic Self-Healing (Multi-pathing)	No	No	Yes
Interoperability	Low	High	High
Vendor/application extensibility	No	No	Yes

Source:L15 Internal and Morgan Keegan Report - Intel

Why Lane15?

Lane15 Delivers	You Get
The right architecture	A pluggable, modular framework that meets InfiniBand specs today — and accommodates future changes.
Complete management focus	Easy- to-use management solutions that integrate into existing enterprise infrastructure without requiring extensive InfiniBand-specific IT training.
Extensibility	A common foundation providing adaptability and optimization as hardware components and specifications change over time.
Improved reliability and availability	Less downtime, because IT managers can more effectively isolate and correct problems
InfiniBand expertise	Leading-edge industry insight and vision through our unique role in InfiniBand Trade Association Working Groups and our strategic partnerships.
Reduced time to market	The benefit of an experienced team, dedicated only to InfiniBand development, freeing your internal IT resources to focus on other priorities.
Lower R&D costs	A cost-effective, tried-and-proven management solution without the headaches, hassle and high costs of developing it yourself.
Guaranteed interoperability	A vendor-neutral heterogeneous approach that supports broad interoperability and portability across a wide range of devices and operating systems.
Faster adoption of InfiniBand technology	A complete fabric management solution, so you can efficiently test and deploy your products.

Call to Action

- Recognize the mission critical role of InfiniBand software
- Plan for long life and extensibility of InfiniBand Networks
- Design in a well architected management solution today!

For Further Information,

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