

IBM InfiniBand Update



OPENFABRICS
ALLIANCE

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Topics

- InfiniBand: Importance to IBM
- IBM InfiniBand Deployment
- IBM IB Deployment Challenges
- IBM Customer Expectations

InfiniBand: Importance to IBM



- InfiniBand is a strategic interconnect for IBM
 - Founding member of IBTA
 - Active involvement in OFA
- IBM efforts targeted to establish InfiniBand as an industry standard
 - Lowers cost of solution for our customers
 - Reduces IBM Development Expenses
- Leverage industry components, software
 - Switches, cables, HCAs, OFA developed software
- Provide IBM value added hardware, firmware & software
 - Virtualizing HCA, IBM Parallel Environment

IBM InfiniBand Deployment



- Supported today on System x & p
 - System x
 - Use industry PCI & HTX based HCA
 - Industry IB switches
 - Utilizes OFA's OFED releases through vendor distributions
 - Driven by Time-to-Market
 - Prefer distro supported versions!
 - System p utilizes OFA OFED releases
 - Use IBM GX HCA (eHCA)
 - Industry IB switches
 - Only supported through Distros releases!

IBM IB Deployment Challenges



- Vendor unique distribution challenges
 - Unique support & diagnostics tools
 - Worldwide service & support capabilities
 - Counter to establishing IB as an industry standard!
- OFED Release model challenges
 - Geared to end users not Enterprise customers
 - “All or none” release approach
- Challenges for IB deployment in commercial environments
 - Delayed availability of protocols & APIs that leverage technology
 - Immaturity of cross-vendor IB management
 - Lag in availability of OFED releases from Linux distros

IBM Customer Expectations



- Vendors
 - Work collaboratively towards interoperability
 - Aggressively embrace and enhance common IB management
 - SM, Diagnostics, etc.
- OFA
 - Tailor OFED activities to distro requirements
 - Change OFED release from “All or none” to “Available when ready” at function/component level!
- Distros
 - Define requirements
 - Join OFA to influence direction
 - Take leadership role in driving OFA’s release process

Limited window of opportunity for InfiniBand !!