IPNx Controller: STM-1 Switching

WTL IPNx STM-1 Switch

- High capacity, high performance TDM + VoIP
- Up to 8 x STM-1 (15,624 calls) in 1 chassis
- Any traffic mix:
  - TDM to TDM
  - VoIP to VoIP
  - TDM to VoIP
- Available in single or HA [High Availability]
- Uses proven, efficient WTL signalling, switching, charging & value-added software

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WTL STM-1 Support

- Classic “NGN / SoftSwitch” Architecture
- MGC [Media Gateway Controller] manages 1 or many MGWs [Media Gateways]
- MGC = IPNx Controller
- IPNx Controller available in single or HA [High Availability]
- MGW = Audiocodes STM-1 blades
- Chassis Options = 2, 4 or 8 E1s

* Note: We use proprietary TPNCP as control protocol not MGCP or H248/Megaco

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STM-1 with IPNx Controller

Architecture

- STM-1 Link includes SS7 Signalling
- WTL solution extracts SS7 signalling from the STM-1*, converts to IP (using M2UA format), sends to IPNx Controller for processing
- Uses WTL stable, proven switching & signalling software
- IPNx Controller server for control logic + chassis for interfaces

*** Note:** Some competitive solutions require STM-1 to E1 multiplexor to extract SS7 signalling

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IPNx Controller

- Controls up to 3 x STM-1s in one or many MGWs
- Also acts as up to 4000 call SoftSwitch
- 2U Chassis, Dual PSU, RAID
- Intel Quad Q8 2 core CPU

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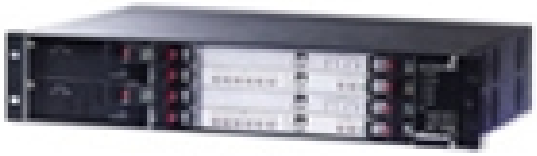
Chassis Options



- M3K: 1 or 2 x STM-1
  - 2U Chassis, Single PSU, No RAID

- M8K: up to 8 x STM-1
  - 12U Chassis, carrier-grade

- WTL IPNx chassis: 2 – 4 STM-1
  - 2U Chassis, RAID, dual PSU

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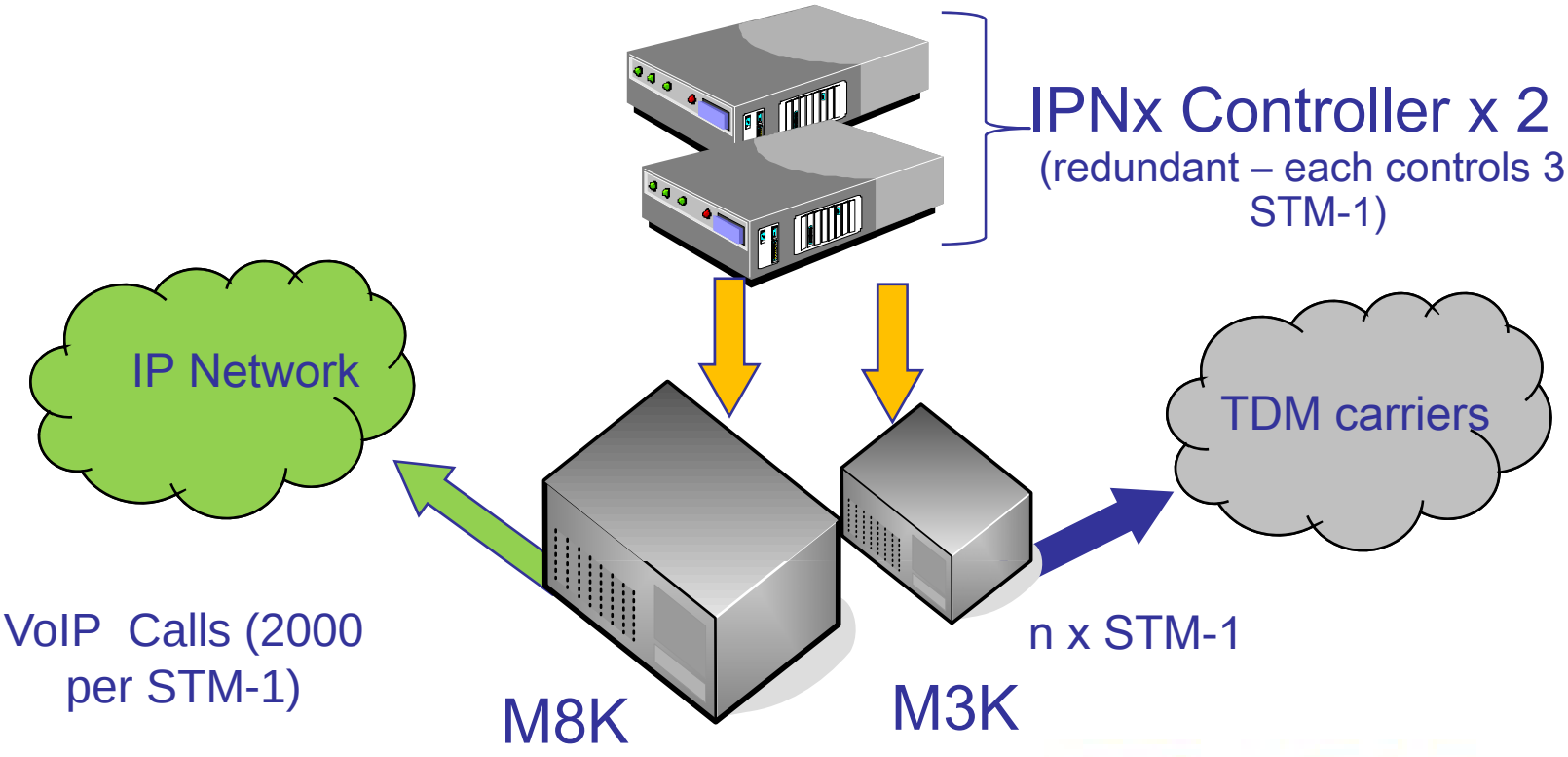
Network Design



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Capacity & Performance

- Up to 3 x STM-1 interfaces controlled by 1 IPNx Controller
- 1 IPNx Controller can manage multiple chassis
- Recommend 2 x IPNx Controllers for resilience
- Up to 4000 VoIP-to-VoIP calls per IPNx

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Capacity & Performance

- Designed for heavy traffic:
  - 200 CPS (calls per second) per IPNx
  - BHCA 300,000 per IPNx
  - 8,000 MSUs (Message Signal Units) per sec
- Up to 32 x SS7 link sets per STM1
- Up to 256 x SS7 link sets per IPNx
- 32 DPC (Destination Point Codes)
- 2 Local Point Codes