



# The Evolution of IP Systems in OB Truck Design

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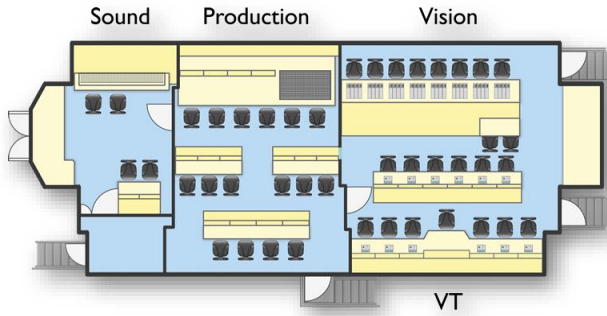
IP SHOWCASE THEATRE AT IBC – SEPT. 14-18, 2018



## A brief history...



# IP SHOWCASE THEATRE



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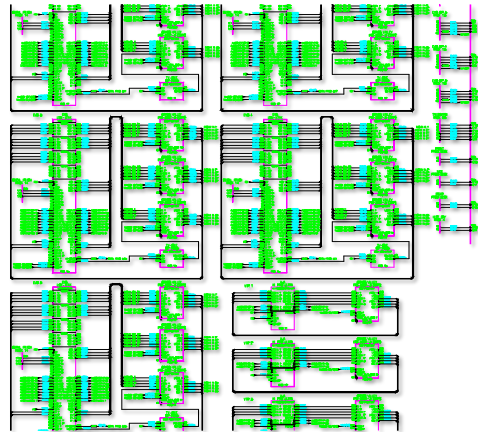


Come and see us!  
Hall 9.A02



## OB X, the design challenges

- Technology questions (2015)
  - Will it work?
    - Lack of reference sites
    - Not enough hardware to build a meaningful PoC
    - Will compression add complexity?
    - Will 12G SDI become the dominant standard?
    - What about interoperability?
    - How will the engineers cope??!!
- The naysayers



## OB X, the naysayers





OB X, the naysayers



*What's  
wrong with  
SDI?*



OB X, the naysayers



*Nobody  
will be able  
to use it*





OB X, the naysayers



*There's no future in IP*



OB X, the naysayers



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ure*



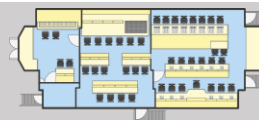




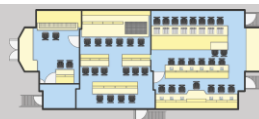
## The result – Autumn 2016



SMPTE 2022-6 based system  
intoPIX TICO 4:1 UHD mezzanine compression  
Baseband AES  
Cisco Nexus 9508



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## Lessons learnt, 2016?

- With some training, broadcast engineers quickly develop an IP skillset
  - Never underestimate their ability to learn
- The user experience doesn't have to change
- IP systems work, and offer tangible benefits over SDI systems





## What's changed since 2016?

- Industry focus on standards and interoperability
  - AIMS
  - IP Showcase
  - SMPTE 2110 adoption
- A growing number of successful installs
- Far more IP enabled products on the market
- A realisation of the benefits of an IP system
- Many revolutions of the lessons learned cycle



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## OB Z design

- Much greater choice of IP enabled products
- More confidence to mix and match
- Neater, more elegant design
- Improved system efficiency
- Improved user interface and flexibility



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## OB X and OB Z Top Trumps

OB X		OB Z
2016	Build year	2018
4	Number of native IP products in each truck	15
2	Number of vendors with IP products in each truck	6
+++++	Amount of manufacturer support	+
26	Weeks to build	12



## What about Mr Naysayer?







What about Mr Naysayer?



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What about Mr Naysayer?



- Demonstrable interoperability
- There is significant expertise within vendor structures and user base
- A wide selection of IP products on the market



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# Thank You

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