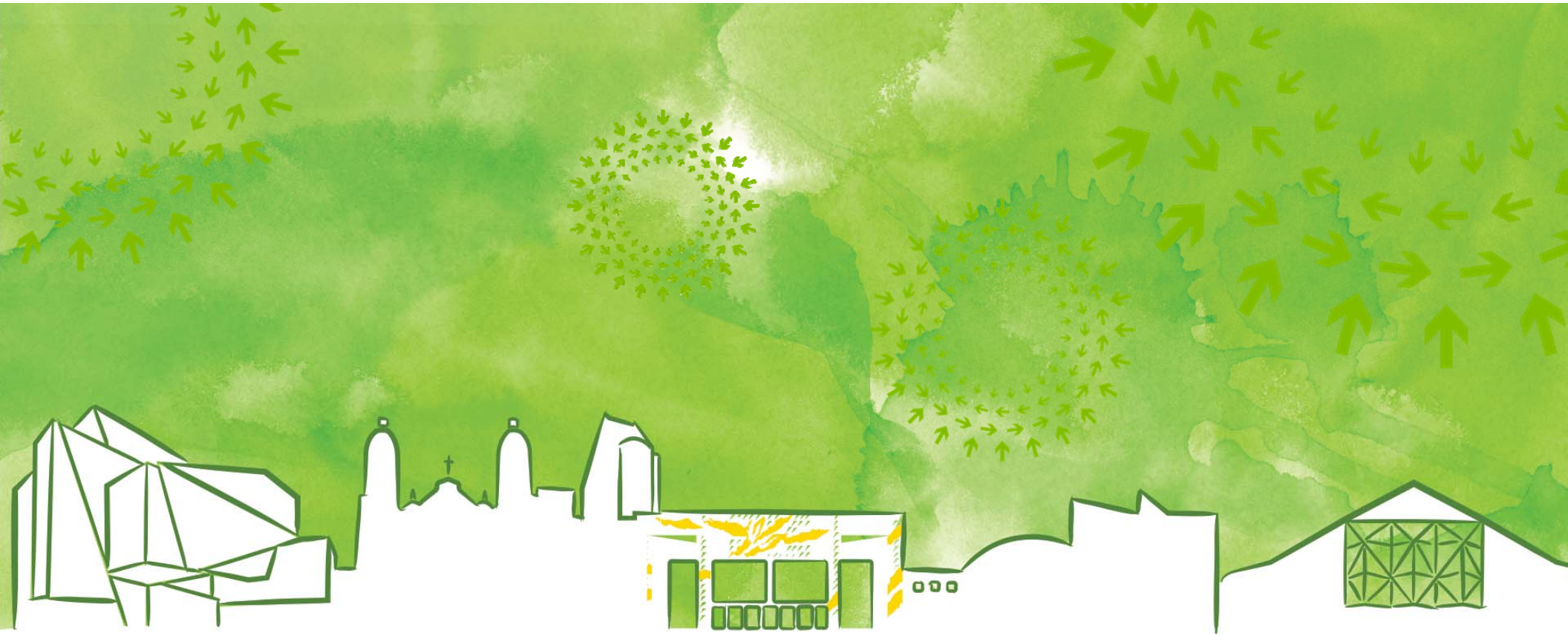

OCP Engineering Workshop **10 August 2016**| Durham, NH

OCP Engineering Workshop – 10 August 2016 – Durham, NH

AT&T OCP Topics

at&t

Architecture & Planning
1057 Lenox Park Blvd.
Room A473
Atlanta, GA 30319

Tom Anschutz
DMTS

+1.404.499.7003
tom.anschutz@att.com

Agenda

- Open GPON OLT
- CORD Reference Architecture
- XGS-PON OLTs
- Designing for Telco Technical Space (a.k.a. COs)

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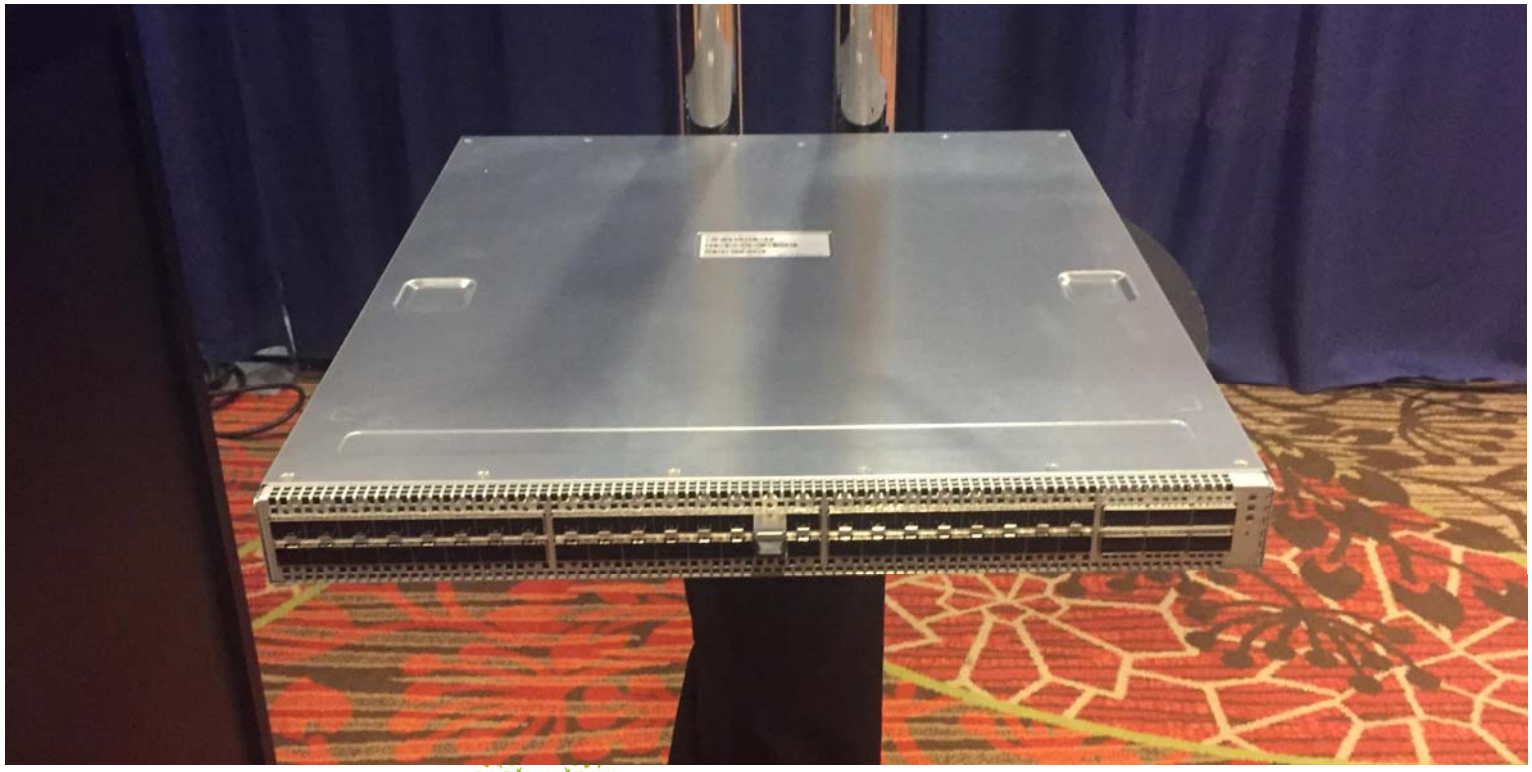
AT&T Open GPON OLT

http://tinyurl.com/cord-trial



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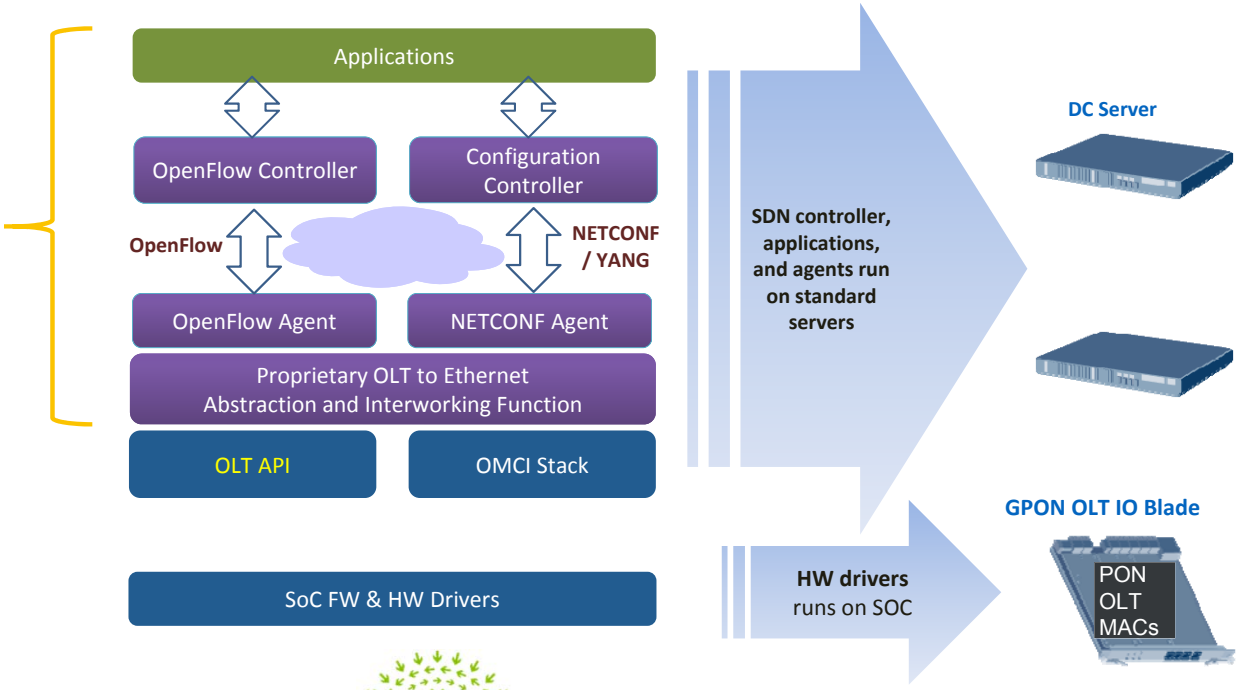
Open GPON Software Stack

CORD

Central Office Re-architected as a Datacenter

Open Software Announcement Next Week at Open Network Summit



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Updates to Spec from IC Review

- Align all references to CPU to be generic
- Espouse Open BMC and IPMI where it can be applied

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Reference Architecture

- Open GPON OLT is a part of a OCP POD to provide Broadband access. The work is done openly and in collaboration at ON.Lab and is called "Central Office Re-architected as a Datacenter" or CORD
- CORD is a broader initiative than just GPON access. It includes XGS-PON, NG-PON, G.Fast, DOCSIS, 5G, MEF-Ethernet, ...
- These should provide some hints at what additional specs might be expected at OCP Telco
- http://opencord.org

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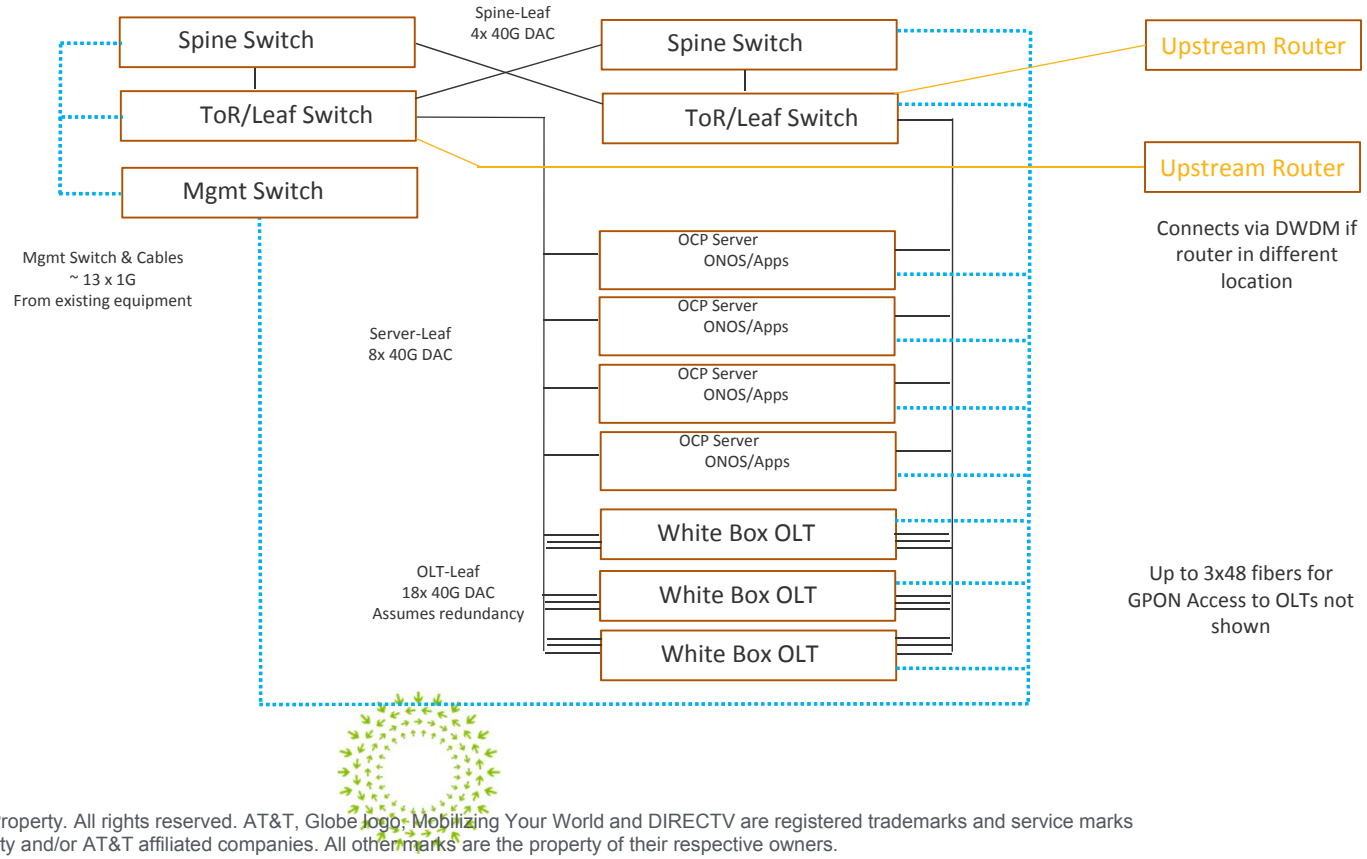
CORD POD

The BoM includes: 4 – Accton 6712 switches, 4 – Quanta S210 servers, 3 – Open GPON OLTs, 1 – Management switch, and various cables, plugs, optics



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XGS-PON OLT Specs

- Applied feedback from IC to these specs as well
  - Generic modular CPU, BMC/IPMI.
- Work is focused on software architecture (creating a community) as we wait for merchant silicon to sample.
- Expect technical updates in the Fall of 2016
- ONIE, Open BMC, SAI for access silicon. (ASAI?)
- Input and feedback are encouraged

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AT&T Technical Space Specs

https://ebiznet.sbc.com/sbcnebs/

- AT&T services are typically 2, 3 and 4 - but rarely 5 - 9s
- There is interest in deriving availability on demand rather than baking it into every element every where
- Some equipment is necessarily a single point of failure. This equipment largely follows traditional NEBS requirements. The Open GPON OLT is such an element, and AT&T TP 76208 applies.
- More equipment is paired or better, and part of an availability set. Servers and fabric switches fall into this category, and AT&T TP 76207 applies.
- These have been introduced on a few calls, and this slide is largely for Q&A.

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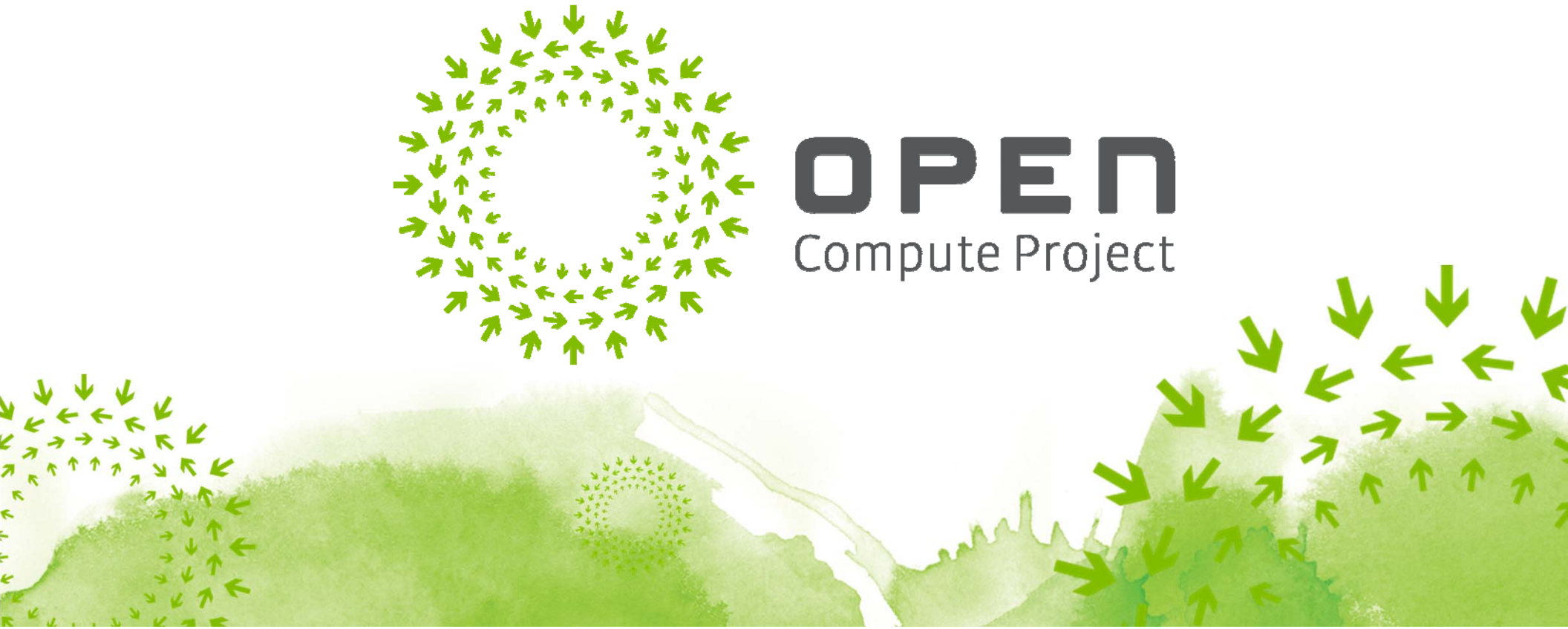
Thank You!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