

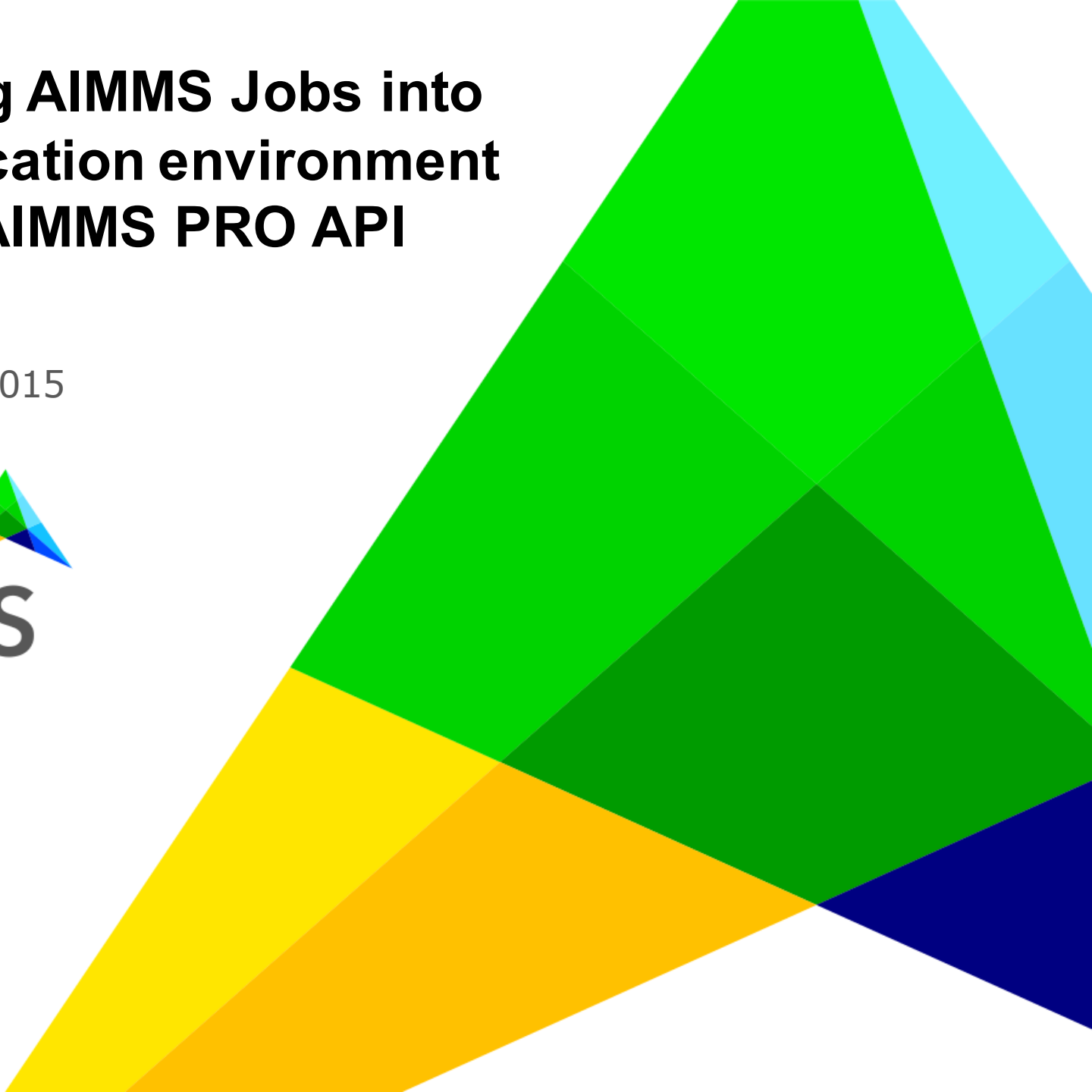
Embedding AIMMS Jobs into your application environment using the AIMMS PRO API

Chris Kuip

December 16, 2015



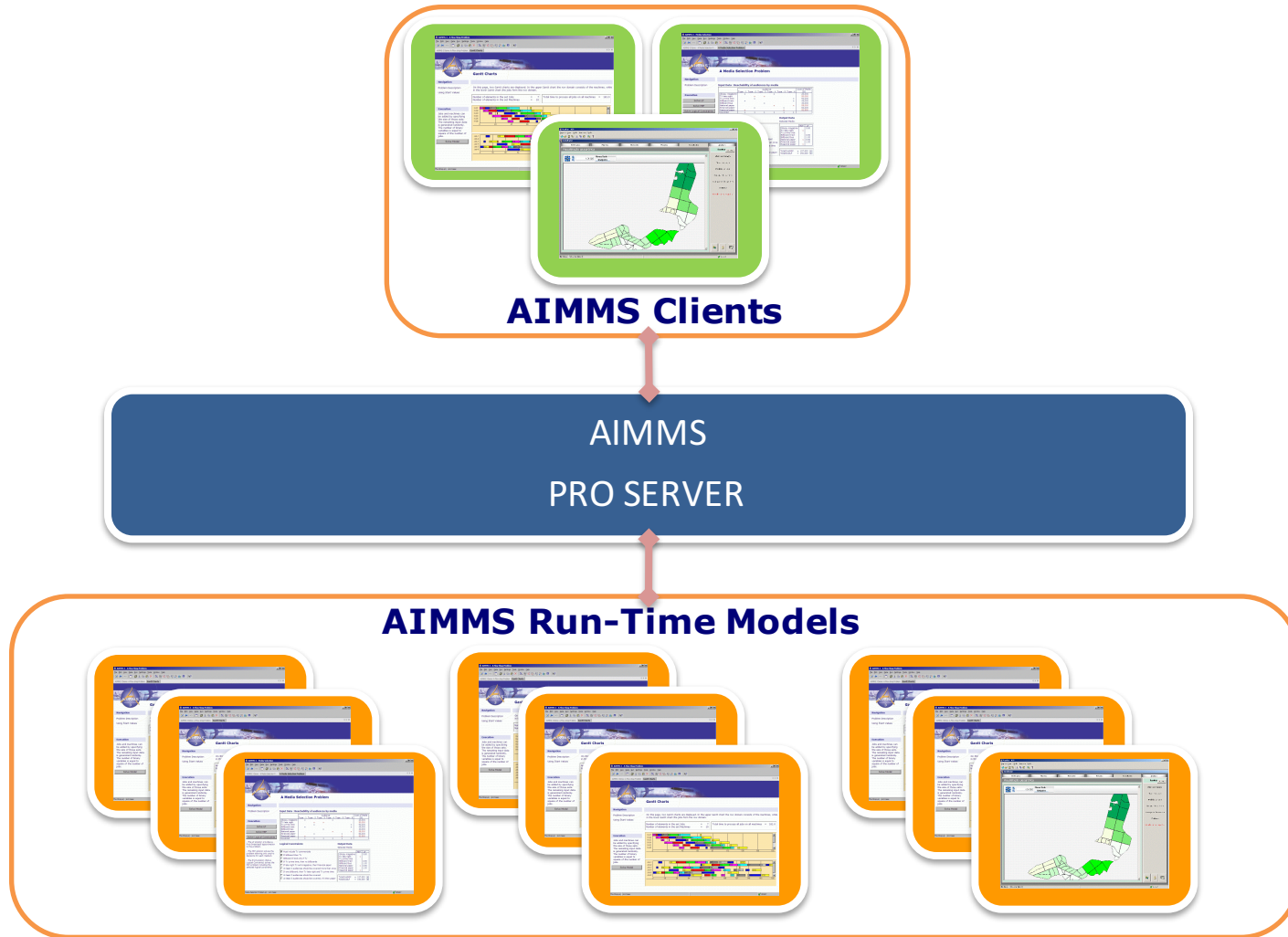
AIMMS



Agenda

- Demo introducing AIMMS PRO
- Architecture: AIMMS PRO API
- Demo PRO API example using Java
- Flowshop model and timeline of involved processes
- Demo Flowshop example using C#
- AIMMS SDK versus AIMMS PRO API

AIMMS PRO



AIMMS PRO

- Brief demo illustrating publish, launch of Flowshop model on AIMMS PRO.

Documentation:

- <http://main.aimms.com/aimms-pro-manual/>

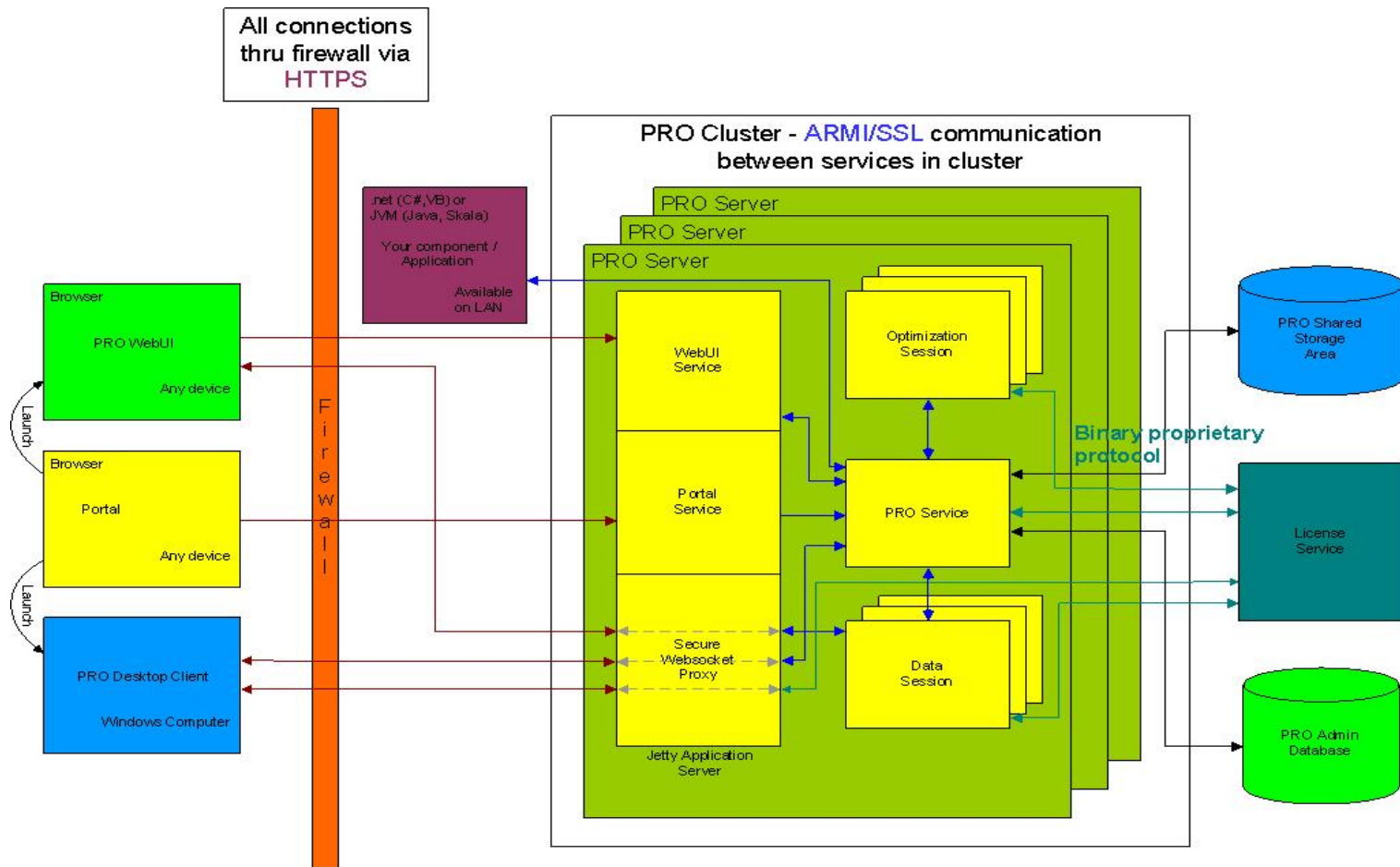
Previous AIMMS PRO webinars:

- how-successfully-deploy-your-application-aimms-pro
- whats-new-aimms-pro-2
- building-web-based-user-interface-around-your-aimms-optimization-application

They are available from:

- <http://www.aimms.com/english/community/customers/training/webinars-demand/>
- <https://www.youtube.com/user/AIMMSChannel>

AIMMS PRO + API ARCHITECTURE



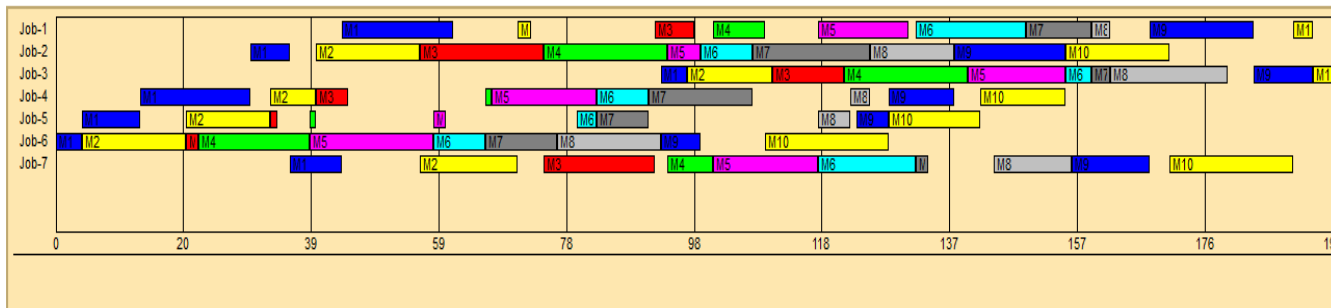
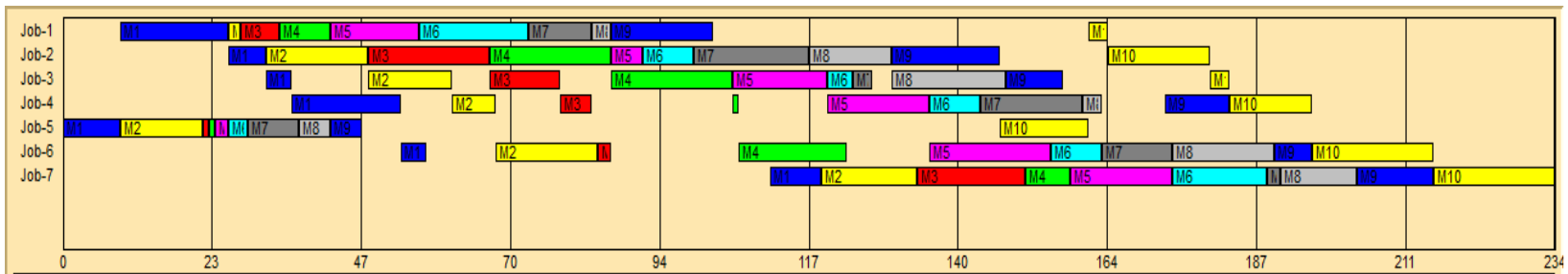
<http://main.aimms.com/aimms-pro-manual/general-architecture/>

Java demo on standard PRO API example.

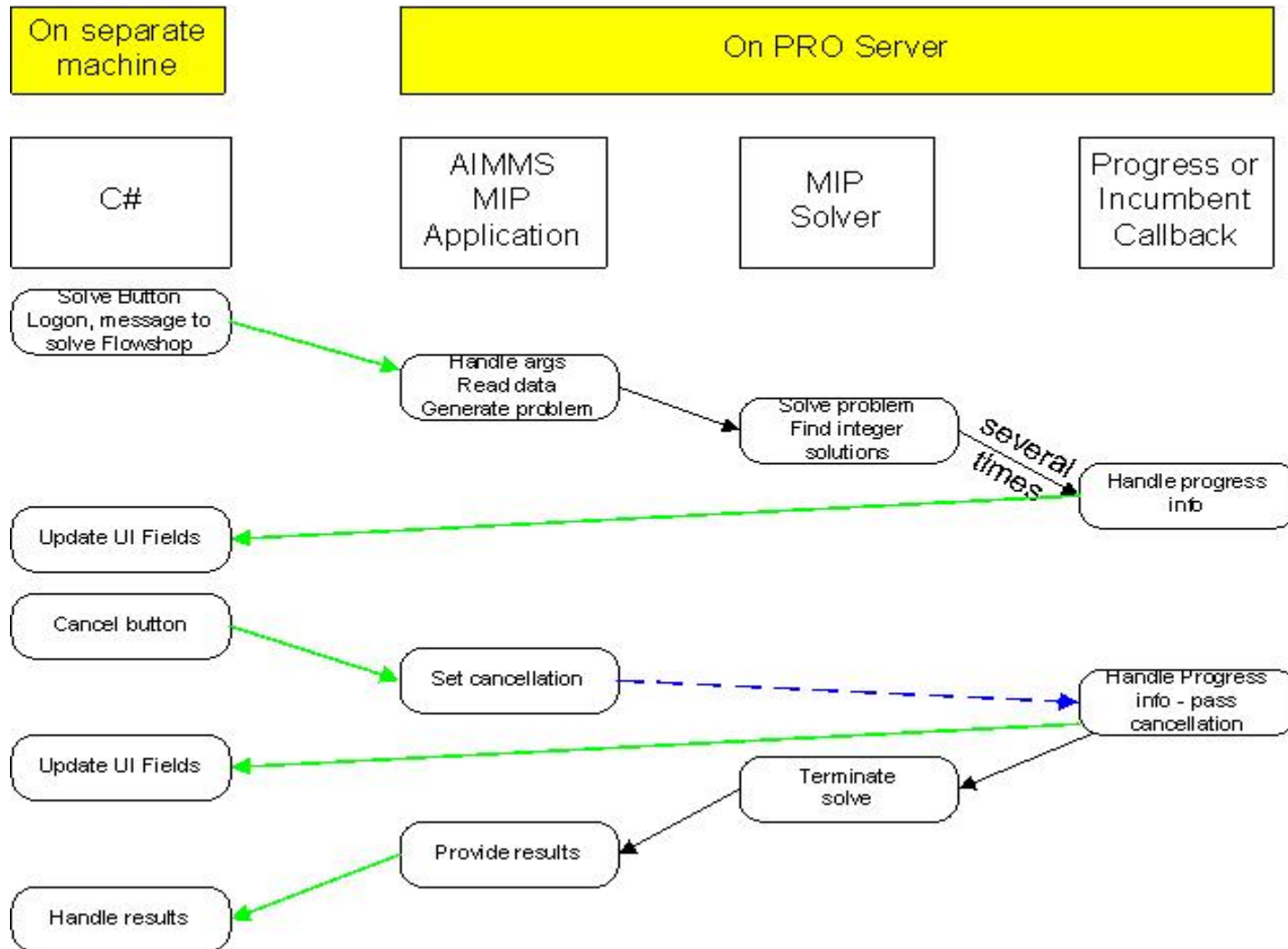


Flowshop model.

- Each job visits collection of machines in a fixed order.
- Per job, machine: the time needed is known but varies.
- Decide on order of jobs
- Minimize makespan.
- 7 Jobs, 10 machines: two solutions, makespans 234 and 196 respectively.



Process timeline of components



C# demo Flowshop model.

C#

AIMMS SDK versus AIMMS PRO API

	SDK	PRO
API for C++, C#, Java apps	√	√
Remote optimization	√	√
API for AIMMS models		√
App publishing		√
User management		√
WebUI - Any device		√
Job queue and management		√
Seat management		√
Case share and management		√
Scale out (cluster)		√
High availability and failover		√
Continued development		√

Next webinar

- The AIMMS – Tableau link.
- Haraldur Haraldsson
- January 20, 2016

Questions?

