
SGiP
WS-Calendar
Viewing the enterprise approach to PAP04
1

WS-Calendar is

- Derived from iCalendar
- A common CIM for communication of schedule between grid, enterprise, facility, and finance
- Developed in close cooperation with standards work in the IETF
- Full of options to express performance expectations and requirements

2

WS-Calendar is said to

- Be far to complex to use
- Be far to verbose, with all thos options and performance expectations
- Be difficult to understand
- Wrap everything inside of some complex calendar thing
- Have all sorts of complicated notions to handle ramps up, ramps down, recurrences, variations, options, …

3

How WS-Calendar works

- Consider
  - Simple Product Description (EMIX)
  - Simple partition (WS-Calendar)
- Product: Power
- Partition:
  - Sequence made up of set of identical duration intervals

Units:	KW	Quantity	10

Simple EMIX Product Description

Start:	8:00	Duration:	1Hour		
		Duration:	1Hour		
		Duration:	1Hour		
		Duration:	1Hour		
		Duration:	1Hour		

WS-Calendar Partition

4

WS-Calendar applied

WS-Calendar describes how an information model is shared between a gluon (invariant parts) and the intervals in a sequence sequence (varying parts)

Works for complex models too, with overrides and inheritance

Power applied to a Partition

Units	KW	Start:	8:00	Duration:	1Hour	Quantity	10
				Duration:	1Hour	Quantity	10
				Duration:	1Hour	Quantity	15
				Duration:	1Hour	Quantity	25
				Duration:	1Hour	Quantity	10

5

WS-Calendar in simple case

- Performance specification ignored
- No relationships between intervals
- Single interval left

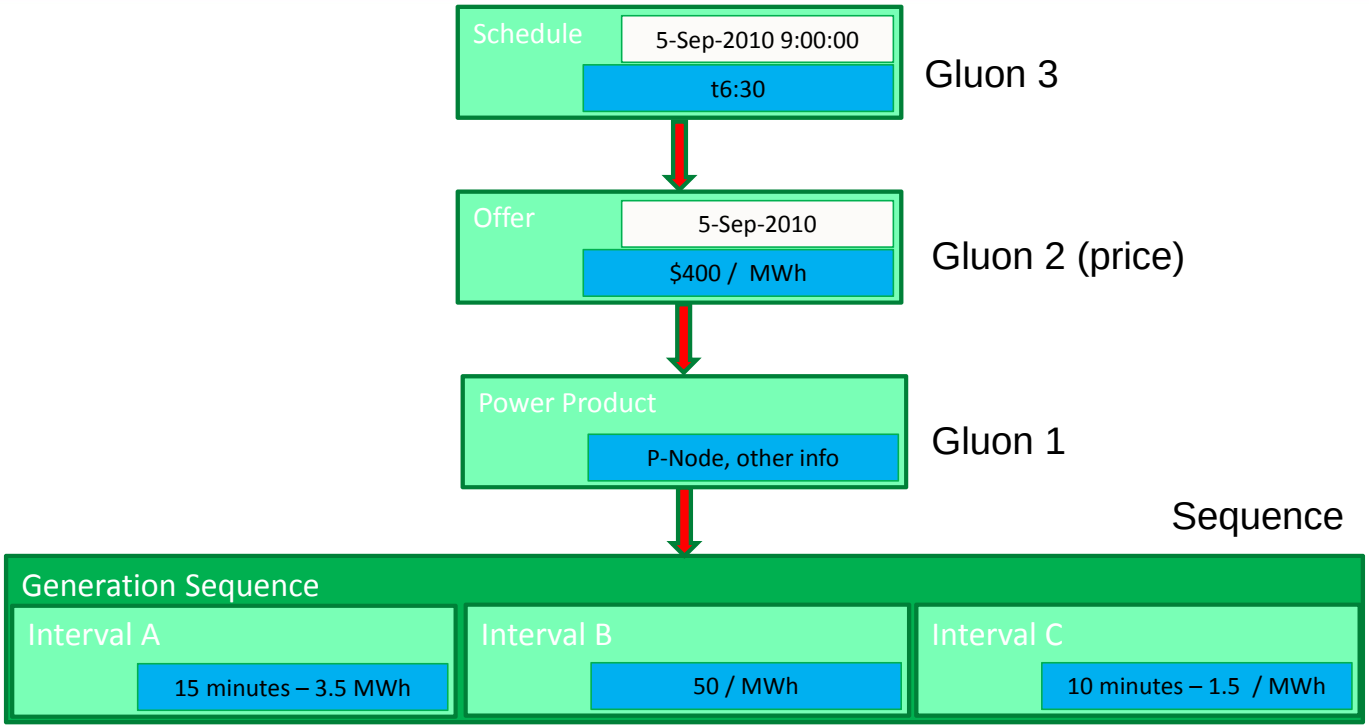
- *Simple expression not far from no WS-Calendar at all…*

Simplicity: sequence collapses back to a single interval

Units	KW	Start:	8:00	Duration:	1Hour	Quantity	10

6

But you still have all the options if you need them



1. Generation source offers to market for scheduling.
2. Primary calendar gluon summarizes market information, defines product
3. Secondary calendar gluon makes proposal, offers product on a given day
4. Load manager accepts offer, schedules performance for 6.5 hours

7