iCalendar and Components. These slides are focused solely on components.
WS-Calendar Components

| interval |
| association |
| interval |
| interval |
| interval |
| interval |
| interval |
| interval |

Association linked to sequence

| association |
| interval |
| interval |
| interval |
| interval |
| interval |
| interval |

Sequence
industrial load profile

energy requirements

5 megawatts
10 megawatts
15 megawatts
15 megawatts
15 megawatts
15 megawatts
15 megawatts
3 megawatts
(1) Sequence of intervals
(2) Each interval contains market information
(3) Whole sequence is scheduled by a single start date / time
Scheduled Sequence

Interval A
15 minutes – 0.035 / kWh

Interval B
30 minutes – 0.045 / kWh

Interval C
15 minutes – 0.085 / kWh

Energy Market Sequence

Interval A
15 minutes
0.035 / kWh

Interval B
30 minutes - 0.045 / kWh

Interval C
0.085 / kWh

Showing inheritance of duration with override in a single interval
The above are equivalent. Scheduling can be added to a sequence without changing the underlying object.
Sequences with Prices only, duration from primary association (with exception) product from primary association. Secondary association tied to contract and market delivery.
1. Catered event books room, requires HVAC to ramp up to premium environmental conditions, event occurs, HVAC provides support during break-down and clearing

2. Sequence set up by system integrator

3. Primary association names sequence, determines entry point of sequence, is otherwise null.

4. Catering software schedules duration of event, capacity requirements for ventilation
1. Generation source offers to market for scheduling.
2. Primary association summarizes market information, defines product
3. Secondary association makes proposal, offers product on a given day
4. Load manager accepts offer, schedules performance for 6.5 hours
1. System integrator load shed, creates contract for EMS
2. EMS offers DR to market
3. Primary association links to contracts together, controls inheritance
4. DR Aggregator reviews offer, including negative shed during system recovery
5. DR Aggregator schedules makes lump sum offer for specific performance.
6. Schedule is inherited by downstream systems
Classroom schedule, showing how associations can be used to create more complex partitions that can still be serialized efficiently, as well as allowing re-use of schedules