Checklist for UPnP™ Standard Device Template Version 1.01

Specified for UPnP Forum Working Committee use in Evaluating Template Design Complete (TDC)

For V 1.01 Standard Device Template

Naming conventions and versioning (Device Template Title Page)

___ 1. The Device name is compliant with UPnP naming and versioning conventions
   a) Device name is descriptive of function and is < 64 characters
   b) Capitalizes first letter of each word used in name of the DeviceType
   c) Draft version number 0.8 - 0.9 is appended to the device name reflecting TDC.
   d) Template file name should match the device name and version replacing ":" with a space. For example, file name = DeviceType 0.8

Overview and Scope (Device Template Section 1)

___ 2. The Overview provides a synopsis of the device's function and intended application.
   a) Provides a clear, 3-5 sentence summary of device functionality.
   b) Identifies primary functions at the embedded device and service level
   c) Identifies functionality not addressed by this device.
   d) Functional diagram includes all major functional components of the device.
   e) Includes a change log outlining evolution of the design at a high level.

Device Model (Device Template section 2.2)

____3. All devices (required and optional) are specified in the Device Requirements table.
   a) The defining deviceType is listed first followed by embedded devices (indented to show hierarchy).
   b) Each embedded device includes a minimum version number.
   c) Root devices are specified. Any device may be root (ie; a root device description includes embedded devices in it's deviceList, where these devices may share an optional Presentation URL versus each device exposing an independent device description and Presentation URL.)
   d) Each device is listed as either required or optional.
   e) The Device Requirements table explicitly specifies any embedded options required by the standard DeviceType:V being defined. Note, for each embedded device, only it's required services and embedded devices are assumed. Therefore, the Device Requirements table must explicitly specify any embedded options that are required.

___ 4. All services (required and optional) are specified in the Device Requirements table.
   a) Each service has a minimum version number.
   b) Each service is listed as either required or optional in the context of the defining DeviceType:V (not in the context of the embedded device).
   c) Each service includes a "ServiceID" that is < 64 characters and is unique within the device context.
   d) ServiceIds for multiple instances of a service use a common descriptive name with an index as necessary to identify the instance.

___ 5. The Description of Device Requirements (recommended) is provided where necessary.
   a) Common services shared between devices are identified (if any)
   b) Multiple instances of a given service are identified (if any)

___ 6. Dependencies and/or interactions (if any) between embedded devices and services are fully specified in section 2.2.2.
   - Note: If no dependencies or interactions are specified, then each embedded device and service is assumed to function independently.
   - For example, most devices will need to specify the affect the SwitchPower service will have on other services.
   - Dependencies and interactions must be adequately specified to facilitate implementation and specification of Device semantic test cases.

Theory of operation (Device Template section 2.3)

___ 7. The Theory of operation (optional) provides a description of device functionality as necessary to facilitate implementation and application.
   a) Includes definition of terms if needed
   b) Provides a pseudo-code description of action sequences that demonstrate how a control point is intended to interact with this device, and explicitly demonstrates the relationships specified in section 2.2.2. Relationships Between Services (if any).
   c) Provides a description of the internal function of the device for example, it's state model (where necessary tp describe device behavior).

XML Device Template (Device Template section 3.0)

___ 8. The XML Device Template is complete
   a) Information identified by Red italics has been specified by the working committee.
   b) The Device Template is consistent with the Device Requirements table.
   c) All device options (Embedded devices and services) have been specified in the XML Device Template.

___ 9. The XML syntax is well formed. Use the following procedure to verify syntax:
   a) Procedure to be provided.

___ 10. The XML schema is valid in accordance with the UPnP template language. Use the following procedure to validate the schema:
   a) Procedure to be provided.

Test (Template section 4.0)

___ 8. TBD

Template Design Complete (TDC) – To be formally declared by the Working Committee

___ 11. This Device template meets Version .8 TDC criteria suitable for implementation and test.

a) This device definition meets requirements of targeted product scenarios
d) There are no unresolved design issues that would prevent sample implementations.
e) The design has been reviewed by at least 3 sample implementers.
b) This device model is well defined in accordance with this checklist.
c) This device template effectively balances the tradeoffs between:
    - Baseline functional requirements for the V1 device
    - Implementation complexity (no. of embedded devices and services)
    - Re-usability (modular, generic building blocks where feasible)
    - Extensibility (Is extensible for Version 2 of the device – if applicable).
d) Device options (embedded devices and services) are limited to the core set required for sample implementation and standardization.
e) The XML device template is complete.
f) Optional and Recommended design descriptions have been completed to the satisfaction of the working committee including:
    - Description of Device Requirements
    - Relationships Between Services
    - Theory of Operation