

### ISO/IEC 29341-6-16

Edition 1.0 2008-11

# INTERNATIONAL STANDARD

Information technology – UPnP Device Architecture –
Part 6-16: Heating, Ventilation, and Air Conditioning Device Control Protocol –
Temperature Setpoint Service

INTERNATIONAL ELECTROTECHNICAL COMMISSION

PRICE CODE

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## INFORMATION TECHNOLOGY – UPNP DEVICE ARCHITECTURE –

## Part 6-16: Heating, Ventilation and Air Conditioning Device Control Protocol – Temperature Setpoint Service

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ISO/IEC 29341-6-16 was prepared by UPnP Implementers Corporation and adopted, under the PAS procedure, by joint technical committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by national bodies of ISO and IEC.

The list of all currently available parts of the ISO/IEC 29341 series, under the general title *Universal plug and play (UPnP) architecture*, can be found on the IEC web site.

This International Standard has been approved by vote of the member bodies, and the voting results may be obtained from the address given on the second title page.

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# ORIGINAL UPNP DOCUMENTS (informative)

Reference may be made in this document to original UPnP documents. These references are retained in order to maintain consistency between the specifications as published by ISO/IEC and by UPnP Implementers Corporation. The following table indicates the original UPnP document titles and the corresponding part of ISO/IEC 29341:

UPnP Device Architecture 1.0         ISO/IEC 29341-1           UPnP Basic: 1 Device         ISO/IEC 29341-2           UPnP MediaRenderer: 1 Device         ISO/IEC 29341-3-1           UPnP MediaRenderer: 1 Device         ISO/IEC 29341-3-1           UPnP MediaServer: 1 Device         ISO/IEC 29341-3-1           UPnP ConnectionManager: 1 Service         ISO/IEC 29341-3-10           UPnP ConnectionManager: 1 Service         ISO/IEC 29341-3-11           UPnP RenderingControl: 1 Service         ISO/IEC 29341-3-13           UPnP MediaServer: 2 Device         ISO/IEC 29341-3-13           UPnP MediaServer: 2 Device         ISO/IEC 29341-4-3           UPnP Av Datastructure Template: 1         ISO/IEC 29341-4-1           UPnP ConnectionManager: 2 Service         ISO/IEC 29341-4-1           UPnP ConnectionManager: 2 Service         ISO/IEC 29341-4-1           UPnP DigitalSecurityCamerasition         ISO/IEC 29341-5-1           UPnP DigitalSecurityCamerasition         ISO/IEC 29341-5-1           UPnP Evp HVAC, 2-oneThermostat: 1 Device         ISO/IEC 29341-5-1	UPnP Document Title	ISO/IEC 29341 Part
UPnP   MediaRenderer:1 Device		
UPnP MediaRenderer:1 Device         ISO/IEC 29341-3-2           UPnP MediaServer:1 Device         ISO/IEC 29341-3-10           UPnP ConnectionManager:1 Service         ISO/IEC 29341-3-10           UPnP ConnectionManager:1 Service         ISO/IEC 29341-3-12           UPnP RenderingControl:1 Service         ISO/IEC 29341-3-12           UPnP RenderingControl:1 Service         ISO/IEC 29341-3-12           UPnP MediaRenderer:2 Device         ISO/IEC 29341-3-13           UPnP AV Datastructure Template:1         ISO/IEC 29341-4-3           UPnP AV Datastructure Template:1         ISO/IEC 29341-4-1           UPnP ConnectionManager:2 Service         ISO/IEC 29341-4-1           UPnP ConnectionManager:2 Service         ISO/IEC 29341-4-1           UPnP ContentDirectory:2 Service         ISO/IEC 29341-4-1           UPnP DigitalSecurityCamerar Device         ISO/IEC 29341-4-1           UPnP DigitalSecurityCamerarSettings:1 Service         ISO/IEC 29341-5-1           UPnP DigitalSecurityCamerarStillimage:1 Service         ISO/IEC 29341-5-1           UPnP HVAC_System:1 Device         ISO/IEC 29341-6-1           UPnP EontrolValve:1 Service         ISO/IEC 29341-6-1           UPnP EmperatureSensor:1 Service         ISO/IEC 29341-6-1           UPnP EmperatureSensor:1 Service         ISO/IEC 29341-6-1           UPnP Dimming:1 Service         ISO/I		
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UPnP DigitalSecurityCameraMotionImage:1 Service         ISO/IEC 29341-5-1           UPnP DigitalSecurityCameraSettings:1 Service         ISO/IEC 29341-5-10           UPnP DigitalSecurityCameraStillmage:1 Service         ISO/IEC 29341-5-12           UPnP HVAC_System:1 Device         ISO/IEC 29341-6-1           UPnP HVAC_ZoneThermostat:1 Device         ISO/IEC 29341-6-1           UPnP HVAC_SanOperatingMode:1 Service         ISO/IEC 29341-6-10           UPnP HOuseStatus:1 Service         ISO/IEC 29341-6-13           UPnP TemperatureSetpoint:1 Service         ISO/IEC 29341-6-14           UPnP TemperatureSetpoint:1 Service         ISO/IEC 29341-6-16           UPnP DimampLight:1 Device         ISO/IEC 29341-6-17           UPnP Dimming:1 Service         ISO/IEC 29341-7-1           UPnP Dimming:1 Service         ISO/IEC 29341-7-1           UPnP Dimming:1 Service         ISO/IEC 29341-7-1           UPnP LANDevice:1 Device         ISO/IEC 29341-8-1           UPnP WANDevice:1 Device         ISO/IEC 29341-8-1           UPnP WANDevice:1 Device         ISO/IEC 29341-8-2           UPnP WANDevice:1 Device         ISO/IEC 29341-8-3		
UPnP DigitalSecurityCameraSettings:1 Service         ISO/IEC 29341-5-10           UPnP DigitalSecurityCameraSettillmage:1 Service         ISO/IEC 29341-5-12           UPnP HVAC_System:1 Device         ISO/IEC 29341-6-1           UPnP HVAC_ZoneThermostat:1 Device         ISO/IEC 29341-6-1           UPnP ControlValve:1 Service         ISO/IEC 29341-6-1           UPnP HVAC_FanOperatingMode:1 Service         ISO/IEC 29341-6-1           UPnP HVAC_SetpointSchedule:1 Service         ISO/IEC 29341-6-12           UPnP HVAC_SetpointSchedule:1 Service         ISO/IEC 29341-6-14           UPnP HVAC_UseroperatingMode:1 Service         ISO/IEC 29341-6-16           UPnP Dimming:1 Device         ISO/IEC 29341-7-1           UPnP DimmableLight:1 Device         ISO/IEC 29341-7-1           UPnP Dimming:1 Service         ISO/IEC 29341-7-1           UPnP Dimming:1 Service         ISO/IEC 29341-8-1           UPnP WANDevice:1 Device         ISO/IEC 29341	UPnP DigitalSecurityCamera:1 Device	ISO/IEC 29341-5-1
UPnP DigitalSecurityCameraStillmage:1 Service         ISO/IEC 29341-5-12           UPnP HVAC_ZoneThermostat:1 Device         ISO/IEC 29341-6-1           UPnP HVAC_ZoneThermostat:1 Device         ISO/IEC 29341-6-10           UPnP HVAC_FanOperatingMode:1 Service         ISO/IEC 29341-6-11           UPnP HVAC_SetpointSchedule:1 Service         ISO/IEC 29341-6-13           UPnP HouseStatus:1 Service         ISO/IEC 29341-6-13           UPnP TemperatureSensor:1 Service         ISO/IEC 29341-6-14           UPnP TemperatureSetpoint:1 Service         ISO/IEC 29341-6-16           UPnP TemperatureSetpoint:1 Service         ISO/IEC 29341-6-16           UPnP TemperatureSetpoint:1 Service         ISO/IEC 29341-6-17           UPnP DimmableLight:1 Device         ISO/IEC 29341-6-17           UPnP DimmableLight:1 Device         ISO/IEC 29341-7-1           UPnP Dimming:1 Service         ISO/IEC 29341-7-1           UPnP SwitchPower:1 Service         ISO/IEC 29341-8-1           UPnP LANDevice:1 Device         ISO/IEC 29341-8-1           UPnP WANDevice:1 Device         ISO/IEC 29341-8-1           UPnP WANDevice:1 Device         ISO/IEC 29341-8-3           UPnP WANDevice:1 Device         ISO/IEC 29341-8-3           UPnP WANDevice:1 Device         ISO/IEC 29341-8-1           UPnP WANDevice:1 Device         ISO/IEC 29341-8-1		
UPnP HVAC_System:1 Device         ISO/IEC 29341-6-1           UPnP HVAC_ZoneThermostat:1 Device         ISO/IEC 29341-6-10           UPnP ControlValve:1 Service         ISO/IEC 29341-6-10           UPnP HVAC_FanOperatingMode:1 Service         ISO/IEC 29341-6-12           UPnP HOuseStatus:1 Service         ISO/IEC 29341-6-12           UPnP HVAC_SetpointSchedule:1 Service         ISO/IEC 29341-6-14           UPnP TemperatureSensor:1 Service         ISO/IEC 29341-6-15           UPnP TemperatureSetpoint:1 Service         ISO/IEC 29341-6-16           UPnP TemperatureSetpoint:1 Service         ISO/IEC 29341-6-16           UPnP BinaryLight:1 Device         ISO/IEC 29341-6-16           UPnP DimmableLight:1 Device         ISO/IEC 29341-7-1           UPnP Dimming:1 Service         ISO/IEC 29341-7-2           UPnP Dimming:1 Service         ISO/IEC 29341-8-1           UPnP SwitchPower:1 Service         ISO/IEC 29341-8-1           UPnP LANDevice:1 Device         ISO/IEC 29341-8-2           UPnP WANDevice:1 Device         ISO/IEC 29341-8-2           UPnP WANDevice:1 Device         ISO/IEC 29341-8-3           UPnP WANDevice:1 Device         ISO/IEC 29341-8-3           UPnP WANDevice:1 Device         ISO/IEC 29341-8-1           UPnP WANDevice:1 Device         ISO/IEC 29341-8-1           UPnP Radius Client:1 Service <td></td> <td></td>		
UPnP HVAC_ZoneThermostat:1 Device         ISO/IEC 29341-6-2           UPnP ControlValve:1 Service         ISO/IEC 29341-6-10           UPnP HVAC_FanOperatingMode:1 Service         ISO/IEC 29341-6-11           UPnP FanSpeed:1 Service         ISO/IEC 29341-6-12           UPnP HouseStatus:1 Service         ISO/IEC 29341-6-13           UPnP TemperatureSensor:1 Service         ISO/IEC 29341-6-16           UPnP TemperatureSetpoint:1 Service         ISO/IEC 29341-6-16           UPnP HVAC_UserOperatingMode:1 Service         ISO/IEC 29341-6-16           UPnP DimmableLight:1 Device         ISO/IEC 29341-7-1           UPnP WanDevice:1 Service         ISO/IEC 29341-8-1           UPnP UpnP Unamed IndexemayDevice:1 Device         ISO/IEC 29341-8-1           UPnP WANDevice:1 Device         ISO/IEC 29341-8-2           UPnP WANDevice:1 Device         ISO/IEC 29341-8-3           UPnP WANDevice:1 Device         ISO/IEC 29341-8-1           UPnP WANDevice:1 Device         ISO/IEC 29341-8-1           UPnP Layer3Forwarding:1 Service         ISO/IEC 29341-8-1           UPnP		
UPnP ControlValve:1 Service         ISO/IEC 29341-6-10           UPnP HVAC_FanOperating/Mode:1 Service         ISO/IEC 29341-6-12           UPnP HouseStatus:1 Service         ISO/IEC 29341-6-13           UPnP HVAC_SetpointSchedule:1 Service         ISO/IEC 29341-6-14           UPnP HVAC_SetpointSchedule:1 Service         ISO/IEC 29341-6-14           UPnP TemperatureSensor:1 Service         ISO/IEC 29341-6-16           UPnP TemperatureSetpoint:1 Service         ISO/IEC 29341-6-16           UPnP TemperatureSetpoint:1 Service         ISO/IEC 29341-6-16           UPnP P TemperatureSetpoint:1 Service         ISO/IEC 29341-6-16           UPnP BinaryLight:1 Device         ISO/IEC 29341-6-16           UPnP DimmableLight:1 Device         ISO/IEC 29341-7-1           UPnP DimmableLight:1 Device         ISO/IEC 29341-7-1           UPnP P SwitchPower:1 Service         ISO/IEC 29341-7-1           UPnP P SwitchPower:1 Service         ISO/IEC 29341-8-1           UPnP WANDevice:1 Device         ISO/IEC 29341-8-1           UPnP WANDevice:1 Device         ISO/IEC 29341-8-3           UPnP WANDevice:1 Device         ISO/IEC 29341-8-3           UPnP WANDevice:1 Device         ISO/IEC 29341-8-1           UPnP WANDevice:1 Device         ISO/IEC 29341-8-1           UPnP WANDevice:1 Service         ISO/IEC 29341-8-1           U		
UPnP HVAC_FanOperatingMode:1 Service         ISO/IEC 29341-6-11           UPnP FanSpeed:1 Service         ISO/IEC 29341-6-12           UPnP HouseStatus:1 Service         ISO/IEC 29341-6-14           UPnP HVAC_SetpointSchedule:1 Service         ISO/IEC 29341-6-15           UPnP TemperatureSetpoint:1 Service         ISO/IEC 29341-6-15           UPnP TemperatureSetpoint:1 Service         ISO/IEC 29341-6-17           UPnP BinaryLight:1 Device         ISO/IEC 29341-6-17           UPnP DimmableLight:1 Device         ISO/IEC 29341-7-1           UPnP Dimming:1 Service         ISO/IEC 29341-7-1           UPnP SwitchPower:1 Service         ISO/IEC 29341-7-1           UPnP InternetGatewayDevice:1 Device         ISO/IEC 29341-8-1           UPnP LANDevice:1 Device         ISO/IEC 29341-8-1           UPnP WANDevice:1 Device         ISO/IEC 29341-8-2           UPnP WANDevice:1 Device         ISO/IEC 29341-8-3           UPnP Layer3Forwarding:1 Service         ISO/IEC 29341-8-5           UPnP Layer3Forwarding:1 Service         ISO/IEC 29341-8-1           UPnP WANCableLinkConfig:1 Service         ISO/IEC 29341-8-1           UPnP WANCableLinkConfig:1 Service         ISO/IEC 29341-8-13           UPnP WANDSLLinkConfig:1 Service         ISO/IEC 29341-8-16           UPnP WANPOTSLinkConfig:1 Service         ISO/IEC 29341-8-17		
UPnP FanSpeed:1 Service         ISO/IEC 29341-6-12           UPnP HouseStatus:1 Service         ISO/IEC 29341-6-13           UPnP HVAC_SetpointSchedule:1 Service         ISO/IEC 29341-6-15           UPnP TemperatureSensor:1 Service         ISO/IEC 29341-6-16           UPnP TemperatureSetpoint:1 Service         ISO/IEC 29341-6-16           UPnP HVAC_UserOperatingMode:1 Service         ISO/IEC 29341-6-17           UPnP DimmableLight:1 Device         ISO/IEC 29341-7-1           UPnP DimmableLight:1 Device         ISO/IEC 29341-7-10           UPnP Dimming:1 Service         ISO/IEC 29341-7-10           UPnP Dimming:1 Service         ISO/IEC 29341-7-10           UPnP Dimming:1 Service         ISO/IEC 29341-8-1           UPnP LANDevice:1 Device         ISO/IEC 29341-8-1           UPnP WANDevice:1 Device         ISO/IEC 29341-8-3           UPnP WANDevice:1 Device         ISO/IEC 29341-8-3           UPnP WANConnectionDevice:1 Device         ISO/IEC 29341-8-3           UPnP Layer3Forwarding:1 Service         ISO/IEC 29341-8-10           UPnP Layer3Forwarding:1 Service         ISO/IEC 29341-8-11           UPnP WANCableLinkConfig:1 Service         ISO/IEC 29341-8-12           UPnP WANCableLinkConfig:1 Service         ISO/IEC 29341-8-14           UPnP WANDESLLinkConfig:1 Service         ISO/IEC 29341-8-16 <td< td=""><td></td><td></td></td<>		
UPnP HouseStatus:1 Service         ISO/IEC 29341-6-13           UPnP HVAC_SetpointSchedule:1 Service         ISO/IEC 29341-6-14           UPnP TemperatureSensor:1 Service         ISO/IEC 29341-6-16           UPnP TemperatureSetpoint:1 Service         ISO/IEC 29341-6-16           UPnP TemperatureSetpoint:1 Service         ISO/IEC 29341-6-17           UPnP BinaryLight:1 Device         ISO/IEC 29341-7-1           UPnP DimmableLight:1 Device         ISO/IEC 29341-7-1           UPnP DimmableLight:1 Device         ISO/IEC 29341-7-1           UPnP SwitchPower:1 Service         ISO/IEC 29341-7-1           UPnP InternetGatewayDevice:1 Device         ISO/IEC 29341-8-1           UPnP WandConnectionDevice:1 Device         ISO/IEC 29341-8-1           UPnP WANDevice:1 Device         ISO/IEC 29341-8-3           UPnP WANConnectionDevice:1 Device         ISO/IEC 29341-8-3           UPnP WANAConfigManagement:1 Service         ISO/IEC 29341-8-5           UPnP LankAuthentication:1 Service         ISO/IEC 29341-8-10           UPnP RadiusClient:1 Service         ISO/IEC 29341-8-12           UPnP WANCableLinkConfig:1 Service         ISO/IEC 29341-8-13           UPnP WANCableLinkConfig:1 Service         ISO/IEC 29341-8-14           UPnP WANPEMERTENTERIOR         ISO/IEC 29341-8-15           UPnP WANPOTSLinkConfig:1 Service         ISO/IEC 29341-8-10 </td <td></td> <td></td>		
UPnP TemperatureSetpoint:1 Service         ISO/IEC 29341-6-15           UPnP TemperatureSetpoint:1 Service         ISO/IEC 29341-6-16           UPnP HVAC_UserOperatingMode:1 Service         ISO/IEC 29341-6-17           UPnP BinaryLight:1 Device         ISO/IEC 29341-7-2           UPnP DimmableLight:1 Device         ISO/IEC 29341-7-2           UPnP Dimming:1 Service         ISO/IEC 29341-7-10           UPnP SwitchPower:1 Service         ISO/IEC 29341-8-1           UPnP InternetGatewayDevice:1 Device         ISO/IEC 29341-8-1           UPnP LANDevice:1 Device         ISO/IEC 29341-8-3           UPnP WANDevice:1 Device         ISO/IEC 29341-8-3           UPnP WANConnectionDevice:1 Device         ISO/IEC 29341-8-3           UPnP WANConnectionDevice:1 Device         ISO/IEC 29341-8-3           UPnP Layer3Forwarding:1 Service         ISO/IEC 29341-8-1           UPnP Layer3Forwarding:1 Service         ISO/IEC 29341-8-10           UPnP Layer3Forwarding:1 Service         ISO/IEC 29341-8-10           UPnP RadiusClient:1 Service         ISO/IEC 29341-8-10           UPnP RadiusClient:1 Service         ISO/IEC 29341-8-12           UPnP WANCommonInterfaceConfig:1 Service         ISO/IEC 29341-8-13           UPnP WANDSLLinkConfig:1 Service         ISO/IEC 29341-8-15           UPnP WANPPConnection:1 Service         ISO/IEC 29341-8-10	•	
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UPnP HVAC_UserOperatingMode:1 Service         ISO/IEC 29341-6-17           UPnP BinaryLight:1 Device         ISO/IEC 29341-7-1           UPnP DimmableLight:1 Device         ISO/IEC 29341-7-2           UPnP Dimming:1 Service         ISO/IEC 29341-7-10           UPnP SwitchPower:1 Service         ISO/IEC 29341-7-11           UPnP InternetGatewayDevice:1 Device         ISO/IEC 29341-8-1           UPnP LANDevice:1 Device         ISO/IEC 29341-8-2           UPnP WANDevice:1 Device         ISO/IEC 29341-8-3           UPnP WANConnectionDevice:1 Device         ISO/IEC 29341-8-3           UPnP WLANAccessPointDevice:1 Device         ISO/IEC 29341-8-5           UPnP Landevice:1 Device         ISO/IEC 29341-8-1           UPnP Wandevice:1 Device         ISO/IEC 29341-8-1           UPnP WANCamentication:1 Service         ISO/IEC 29341-8		
UPnP BinaryLight:1 Device UPnP DimmableLight:1 Device UPnP Dimming:1 Service UPnP SwitchPower:1 Service UPnP InternetGatewayDevice:1 Device UPnP LANDevice:1 Device UPnP WANDevice:1 Device UPnP WANDevice:1 Device UPnP WANDconnectionDevice:1 Device UPnP Layer3Forwarding:1 Service UPnP LinkAuthentication:1 Service UPnP WANCommonInterfaceConfig:1 Service UPnP WANCommonInterfaceConfig:1 Service UPnP WANDSLLinkConfig:1 Service UPnP WANDELinkConfig:1 Service UPnP WANDSLLinkConfig:1 Service UPnP WANDSLLinkConfig:1 Service UPnP WANDFORDECCESSERIES SERVICE UPNP BEXTERNALACTIVITY.1 SERVICE UPNP BEXTERNALACTIVITY.1 SERVICE UPNP ExternalActivity:1 Service UPNP ExternalActivity:1 Service UPNP ExternalActivity:1 Service UPNP Cosan:1 Service UPNP Cosan:1 Service UPNP Qos Architecture:1.0 UPNP Qos Architecture:1.0 UPNP Qos PolicyHolder:1 Service UPNP Qos Architecture:2 UPNP Qos Architecture:2		
UPnP DimmableLight:1 Device UPnP Dimming:1 Service UPnP Dimming:1 Service UPnP SwitchPower:1 Service UPnP InternetGatewayDevice:1 Device UPnP LANDevice:1 Device UPnP WANDevice:1 Device UPnP WANDevice:1 Device UPnP WANConnectionDevice:1 Device UPnP Layer3Forwarding:1 Service UPnP LinkAuthentication:1 Service UPnP LinkAuthentication:1 Service UPnP RadiusClient:1 Service UPnP RadiusClient:1 Service UPnP WANCommonInterfaceConfig:1 Service UPnP WANCommonInterfaceConfig:1 Service UPnP WANDOSLLinkConfig:1 Service UPnP WANDOSLLinkConfig:1 Service UPnP WANDOSLLinkConfig:1 Service UPnP WANDOSLLinkConfig:1 Service UPnP WANDOTSLinkConfig:1 Service UPnP WANPOTSLinkConfig:1 Service UPnP Scanner:1.0 Device UPnP ExternalActivity:1 Service UPnP ExternalActivity:1 Service UPnP Feeder:1.0 Service UPnP Feeder:1.0 Service UPnP Scan:1 Service UPnP Oso Architecture:1.0 UPnP Qos PolicyHolder:1 Service UPnP Qos PolicyHolder:1 Service UPnP Qos PolicyHolder:1 Service UPnP Qos Architecture:2 UPnP Qos Architecture:2 UPnP Qos Architecture:2		
UPnP Dimming:1 Service         ISO/IEC 29341-7-10           UPnP SwitchPower:1 Service         ISO/IEC 29341-7-11           UPnP InternetGatewayDevice:1 Device         ISO/IEC 29341-8-1           UPnP LANDevice:1 Device         ISO/IEC 29341-8-2           UPnP WANDevice:1 Device         ISO/IEC 29341-8-3           UPnP WANConnectionDevice:1 Device         ISO/IEC 29341-8-4           UPnP WLANAccessPointDevice:1 Device         ISO/IEC 29341-8-5           UPnP LANHostConfigManagement:1 Service         ISO/IEC 29341-8-5           UPnP Layer3Forwarding:1 Service         ISO/IEC 29341-8-10           UPnP Layer3Forwarding:1 Service         ISO/IEC 29341-8-10           UPnP Layer3Forwarding:1 Service         ISO/IEC 29341-8-11           UPnP LinkAuthentication:1 Service         ISO/IEC 29341-8-12           UPnP RadiusClient:1 Service         ISO/IEC 29341-8-12           UPnP RadiusClient:1 Service         ISO/IEC 29341-8-13           UPnP WANCableLinkConfig:1 Service         ISO/IEC 29341-8-15           UPnP WANDSLLinkConfig:1 Service         ISO/IEC 29341-8-16           UPnP WANDSLLinkConfig:1 Service         ISO/IEC 29341-8-16           UPnP WANPOTSLinkConfig:1 Service         ISO/IEC 29341-8-18           UPnP WANPPPConnection:1 Service         ISO/IEC 29341-8-19           UPnP WANPPPConnection:1 Service         ISO/IEC 29341-9-1 <td></td> <td></td>		
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UPnP WANDevice:1 Device ISO/IEC 29341-8-3 UPnP WANConnectionDevice:1 Device ISO/IEC 29341-8-4 UPnP WLANAccessPointDevice:1 Device ISO/IEC 29341-8-5 UPnP LANHostConfigManagement:1 Service ISO/IEC 29341-8-10 UPnP Layer3Forwarding:1 Service ISO/IEC 29341-8-11 UPnP LinkAuthentication:1 Service ISO/IEC 29341-8-11 UPnP RadiusClient:1 Service ISO/IEC 29341-8-12 UPnP RadiusClient:1 Service ISO/IEC 29341-8-13 UPnP WANCableLinkConfig:1 Service ISO/IEC 29341-8-14 UPnP WANCableLinkConfig:1 Service ISO/IEC 29341-8-15 UPnP WANDSLLinkConfig:1 Service ISO/IEC 29341-8-16 UPnP WANDSLLinkConfig:1 Service ISO/IEC 29341-8-16 UPnP WANIPConnection:1 Service ISO/IEC 29341-8-18 UPnP WANPOTSLinkConfig:1 Service ISO/IEC 29341-8-19 UPnP WANPPPConnection:1 Service ISO/IEC 29341-8-19 UPnP WANPPPConnection:1 Service ISO/IEC 29341-8-20 UPnP WLANConfiguration:1 Service ISO/IEC 29341-8-21 UPnP Printer:1 Device ISO/IEC 29341-9-1 UPnP Scanner:1.0 Device ISO/IEC 29341-9-1 UPnP ExternalActivity:1 Service ISO/IEC 29341-9-10 UPnP Feeder:1.0 Service ISO/IEC 29341-9-10 UPnP PrintBasic:1 Service ISO/IEC 29341-9-11 UPnP Qos Architecture:1.0 UPnP Qos Architecture:1.0 UPnP Qos Manager:1 Service ISO/IEC 29341-10-10 UPnP Qos Architecture:2 ISO/IEC 29341-10-11 UPnP Qos Architecture:2 ISO/IEC 29341-10-11	UPnP InternetGatewayDevice:1 Device	ISO/IEC 29341-8-1
UPnP WANConnectionDevice:1 Device UPnP WLANAccessPointDevice:1 Device UPnP WLANAccessPointDevice:1 Device UPnP LANHostConfigManagement:1 Service UPnP Layer3Forwarding:1 Service UPnP Layer3Forwarding:1 Service UPnP LinkAuthentication:1 Service UPnP RadiusClient:1 Service UPnP RadiusClient:1 Service UPnP WANCableLinkConfig:1 Service UPnP WANCableLinkConfig:1 Service UPnP WANCommonInterfaceConfig:1 Service UPnP WANDSLLinkConfig:1 Service UPnP WANDSLLinkConfig:1 Service UPnP WANEthernetLinkConfig:1 Service UPnP WANIPConnection:1 Service UPnP WANPOTSLinkConfig:1 Service UPnP WANPOTSLinkConfig:1 Service UPnP WANPPPConnection:1 Service UPnP Scanner:1.0 Device UPnP ExternalActivity:1 Service UPnP ExternalActivity:1 Service UPnP PrintBasic:1 Service UPnP Scan:1 Service UPnP Scan:1 Service UPnP Scan:1 Service UPnP Qos Architecture:1.0 UPnP Qos Architecture:1.0 UPnP Qos Architecture:1 Service UPnP Qos Architecture:2 UPnP Qos Architecture:2 UPnP Qos Architecture:2		
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UPnP Layer3Forwarding:1 Service         ISO/IEC 29341-8-11           UPnP LinkAuthentication:1 Service         ISO/IEC 29341-8-12           UPnP RadiusClient:1 Service         ISO/IEC 29341-8-13           UPnP WANCableLinkConfig:1 Service         ISO/IEC 29341-8-14           UPnP WANCommonInterfaceConfig:1 Service         ISO/IEC 29341-8-15           UPnP WANDSLLinkConfig:1 Service         ISO/IEC 29341-8-16           UPnP WANEthernetLinkConfig:1 Service         ISO/IEC 29341-8-17           UPnP WANIPConnection:1 Service         ISO/IEC 29341-8-18           UPnP WANPOTSLinkConfig:1 Service         ISO/IEC 29341-8-19           UPnP WANPPConnection:1 Service         ISO/IEC 29341-8-20           UPnP WANPPConnection:1 Service         ISO/IEC 29341-8-21           UPnP Printer:1 Device         ISO/IEC 29341-8-21           UPnP Printer:1 Device         ISO/IEC 29341-9-1           UPnP ExternalActivity:1 Service         ISO/IEC 29341-9-1           UPnP PrintBasic:1 Service         ISO/IEC 29341-9-11           UPnP Poscan:1 Service         ISO/IEC 29341-9-13           UPnP Qos Architecture:1.0         ISO/IEC 29341-10-1           UPnP QosManager:1 Service         ISO/IEC 29341-10-1           UPnP Qos Architecture:2         ISO/IEC 29341-10-1		
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UPnP Scan:1 Service         ISO/IEC 29341-9-13           UPnP QoS Architecture:1.0         ISO/IEC 29341-10-1           UPnP QosDevice:1 Service         ISO/IEC 29341-10-10           UPnP QosManager:1 Service         ISO/IEC 29341-10-11           UPnP QosPolicyHolder:1 Service         ISO/IEC 29341-10-12           UPnP Qos Architecture:2         ISO/IEC 29341-11-1		
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UPNP QUS V2 Schema Files ISO/IEC 29341-11-2		
	UPIIP QUS VZ SCREMA FIIES	150/IEC 29341-11-2

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UPnP Document Title	ISO/IEC 29341 Part
UPnP QosDevice:2 Service UPnP QosManager:2 Service UPnP QosPolicyHolder:2 Service UPnP RemoteUIClientDevice:1 Device UPnP RemoteUIServerDevice:1 Device UPnP RemoteUIClient:1 Service UPnP RemoteUIServer:1 Service UPnP DeviceSecurity:1 Service UPnP SecurityConsole:1 Service	ISO/IEC 29341-11-10 ISO/IEC 29341-11-11 ISO/IEC 29341-11-12 ISO/IEC 29341-12-1 ISO/IEC 29341-12-2 ISO/IEC 29341-12-10 ISO/IEC 29341-13-11 ISO/IEC 29341-13-10 ISO/IEC 29341-13-11

#### 1. Overview and Scope

This service definition is compliant with the UPnP Device Architecture version 1.0.

This service-type enables the following functions:

- The means to set and get a temperature set point for use by a temperature controller.
- The highest and lowest valid temperature values for the set point are defined by the vendor.
- An interface is provided that allows notification when a controlled region has reached the temperature control band per this temperature controller's design.
- A vendor fined application type. This allows re-use of this service for multiple applications.

This service does not include:

• The closed-loop control interface that is part of a temperature controller.