CTA Standard

Task Model Description (CE TASK 1.0)

CTA-2018 R2016

(Formerly ANSI/CEA-2018)

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Consumer Technology Association™

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(Formulated under the cognizance of the CTA **R7 Home Networks Committee**.)

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FOREWORD

This standard was developed under the auspices of the Consumer Electronics Association (CEA) R7 Home Network Committee.

All of the RelaxNG schemas and XML examples in this document have been automatically inserted from files and mechanically checked for syntactic validity.

First time readers are advised to first read the informative introduction in 6.

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1 SCOPE

A task model is a formal description of the activities involved in completing a task, including both activities carried out by humans and those performed by machines. This standard defines the semantics and an XML notation for task models relevant to consumer electronics devices. The standard does not depend on any specific home networking technology or infrastructure.

2 CONFORMANCE (Informative)

Figure 1 illustrates the conformance approach of this standard. At the center of the diagram is a *task model description*, which is an XML document. A task model description is used by a *task-based application* to guide its interaction with a user. A task model description specifies task classes, and representations of their intent and how high-level tasks can be decomposed into lower-level tasks. A task model description also contains ECMAScript programs which ground primitive tasks to devices via particular networking platforms. This standard defines an XML language for task model descriptions which is independent of task-based applications. See 6 for a further informative introduction tasks and task modeling.

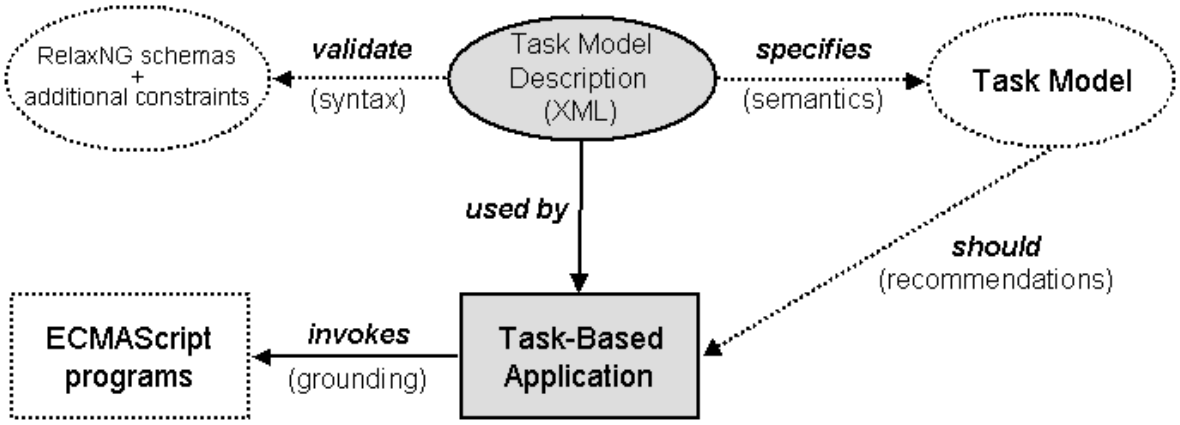

Figure 1: Conformance to This Standard

In general, the process of writing (authoring), distributing and using a task model description involves various stakeholders.

There are many different options for writing and distributing a task model description. First, a device manufacturer may write a task model description for their device, and either build it into the device so that it can be retrieved by a task-based application (see [REF 10.2.4]) or distribute it through their web server. Second, the developer of a task-based application may build task model descriptions into their application, or more likely, provide them through their web server. Finally, a third party may write task model descriptions for any device and make it available publicly through a web server.

Task model descriptions from different sources may mutually reference each other. For example, some task model descriptions may serve as “libraries” for specific domains. Similarly, the author of the ECMAScript program used to ground a particular task class (for a particular platform) may be different from the author of the task class specification.