

Download Descriptor

OMA (Open Mobile Alliance) has specified procedures for downloading objects, such as files linked to a Web page over the air (OTA) for mobile devices. The OMA download OTA (DLOTA) specification "Generic Content Download Over The Air Specification", version 1.0, 21 Feb. 2003, describes a method for downloading content over the air from a content provider infrastructure to a client (Download Agent). The OMA Download OTA is also referred to as a user-initiated download protocol as the user is able to authorize each download transaction. After a discovery phase (e.g. via browsing), the download agent (DA) downloads a download descriptor file (DD) that contains information about the upcoming media object. The download agent processes the download descriptor file to determine the device capability (available memory or supported media type, for instance) in order to proceed with the download. The download descriptor also contains the URI (uniform resource identifier) indicating the location from which the media object is going to be downloaded from. However, before accessing such a URI, the user is prompted with a request whether s/he accepts the download or not. If the user accepts to proceed with the OTA transaction, the download agent downloads the media object.

However, the user confirmation for each OTA transaction limits the deployment scenarios of the OMA OTA downloading. It is not possible to arrange downloading which is transparent for the user. For instance, a game, which the user is playing, may require an update file to be downloaded from a game service provider. The user confirmation is prompted in the screen and the user's ongoing game is interrupted. There may be other cases in which the user confirmation represents an unnecessary step for the download transaction.