

Wednesday, March 26, 2008

## Stateful Documents - Imagine a world of "automatically updated" documents

We're on the cusp of a new generation of document distribution systems utilizing central storage and there are some interesting security questions that will need to be answered in order for the transition to occur. Essentially, document management systems are nearly integrated with the client endpoint. There are several technologies that are converging together than will change the face of how data is managed today. These technologies are "data leak/loss prevention (DLP)", "digital rights management (DRM)". These two technologies will eventually be coupled together to form an elastic band around documents travelling throughout the corporate or personal networks. Data will eventually be controlled centrally no matter where it resides so that management of said data will be easy and more structured.

The latest idea I had was for a "stateful data object architecture" (SDOA). Once the DLP and DRM convergence occurs, the next challenge is to ensure that only "one" copy of the data exists in any given environment. This would reduce overall storage requirements and ensure that an organization's data is not duplicated, outdated, or in essence causing inefficiencies throughout the organic nature of human social groups. My best guess at this time is that one of the "content management systems (CMS) vendors will introduce an architecture that will enable distribution of "copies" of documents or artifacts, and when that artifact is changed in the central repository, the endpoints will automatically have state awareness of the document version change and will then prompt for the user to accept the "updated" document onto their system.

This presents some interesting security questions on how to authenticate and encrypt the documents in transit so that one can "trust" the centralized document repository in order to properly ensure that the document was not modified in storage or "spoofed" by a third party. To that end, I leave it to you the reader to decide where it will go from here, but for me, I'm intrigued on where we are going and what lies ahead in the "stateful data object architecture (SDOA)".

Again, I invented it and released it to you, no l0zers can claim it now.



Enjoy!

Posted by Lawrence Pingree in Security at 11:03