



# **e-RA**

## **E-Authentication Risk and Requirements Assessment**

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## *How does e-RA fit into the big picture?*

- ◆ E-Authentication Guidance for Federal Agencies (OMB M-04-04, Memorandum for Heads of all Departments and Agencies)
- ◆ E-Authentication Technical Guidance (NIST Special Pub 800-63)
- ◆ Credential Assessment Framework (Credential Providers)
- ◆ e-RA (Agency Applications/Transactions)

## *What is e-RA?*

- ◆ The **e-Authentication Initiative** was established to provide a common, interoperable authentication service for the **President's e-Government Initiatives**. In order to provide this service, the e-Authentication project needed to identify the full range of authentication requirements for the Initiatives.
- ◆ The e-Authentication Initiative partnered with the Software Engineering Institute (SEI) at Carnegie Mellon University to develop a risk-based approach to authentication requirements called **e-Authentication Risk and Requirements Assessment**, or **e-RA**. This approach identifies the risks associated with insufficient authentication of an e-Government Initiative user, and it forms the basis for the definition of authentication requirements.

## *What is the e-RA approach?*

- ◆ The e-RA approach is essentially a risk-based requirements elicitation process to identify the risks and impacts that could result if user authentication controls are non-existent or inadequate.
- ◆ Its focus is to ensure that a user has the proper credential to perform a particular transaction in an on-line system or web portal.
- ◆ The e-RA approach produces a mapping of the transaction to a set of pre-defined authentication criteria that represent various levels of proving a user's identity.
- ◆ The mapping can then be used to identify and implement technological and operational solutions that ensure the transaction's authentication requirements are achieved.

## *What are e-RA's Objectives?*

- ◆ Document and characterize an initiative's transactions and associated data.
- ◆ Identify the risks (threats and impacts) associated with authentication of the actors (or users) for the initiative's range of transactions.
- ◆ Define the authentication criteria for the initiative's transactions, which can be developed into authentication requirements.
- ◆ Analyze the authentication needs to define standardized levels of authentication and identity for E-Authentication Services.

## ***Who Should Conduct the e-RA?***

- ◆ The e-RA team should consist of 1-5 persons.
- ◆ The personnel should be knowledgeable about the project's business case or application's requirements.
- ◆ This team must be able to describe the range of transactions offered and to identify commonly used and critical transactions.
- ◆ They must also be able to identify and analyze the consequences of unauthorized use of the transactions.

## *Where do I get it?*

- ◆ <http://www.cio.gov/eauthentication>
- ◆ If you have Access 2000 loaded on your PC, download the [MDB File - 1.44 MB in size](#)
- ◆ If you need the full version of the e-RA Tool, download the [WinZip File - 128 MB in size](#)
- ◆ Also download the e-RA Guidance Document

# *e-RA Demonstration*