Digital Archiving and Retrieval Tool

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Introduction

Archiving digital data, especially Computer Aided Design (CAD) data is becoming an increasingly important task for design engineers because engineering projects need to be retrieved and maintained long-term. One specific example is Boeing Corporation's B-52 strategic bomber, which was designed in 1945 and will be used until 2040, according to U.S. defense plans. Since there are few applications that adequately allow users to archive files with minimal effort, many engineers do not take the time to fully document and preserve the design processes of a project because it does not fit into their workflow when using these applications. Such archiving tools are sometimes too time-consuming or difficult to use. The Digital Archiving and Retrieval Tool (DART) addresses these issues by striving to make the process of archiving as simple and minimally obtrusive as possible for engineers and others who wish to use it.
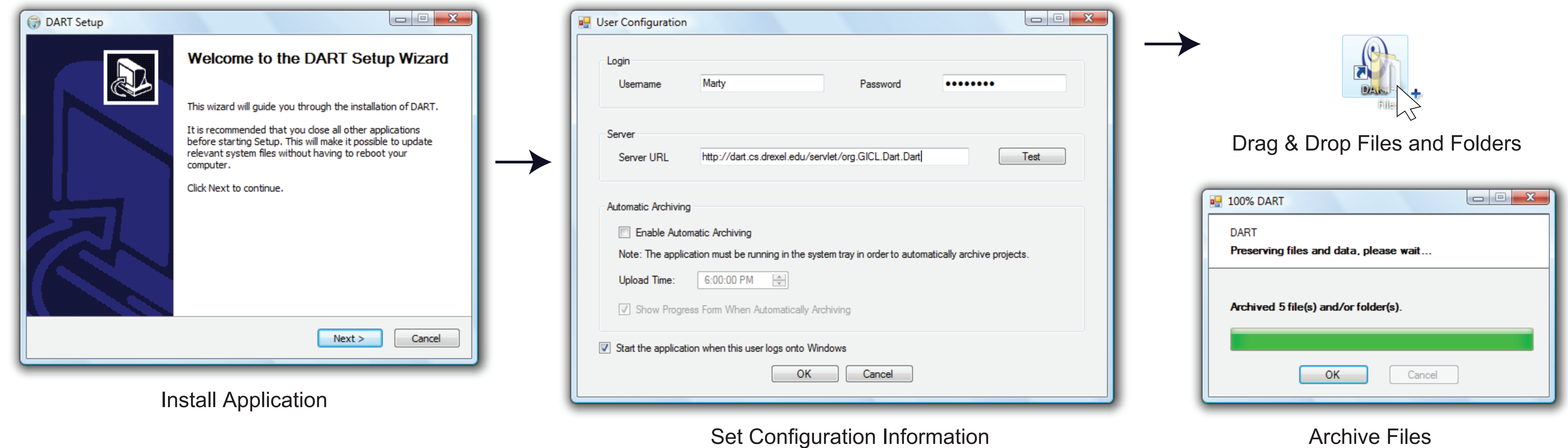
Problem Domain

• Engineers do not always archive and fully document their projects
• Some data is not archived and if it is it may only be stored on one machine
• Relevant metadata such as particular installed programs and running processes need to be captured
• The system needs to be easy to maintain and update when necessary
• The server should be accessible by many different clients and use a protocol that is easy to understand
• Engineers may not be willing to use an additional application if it interrupts their workflow
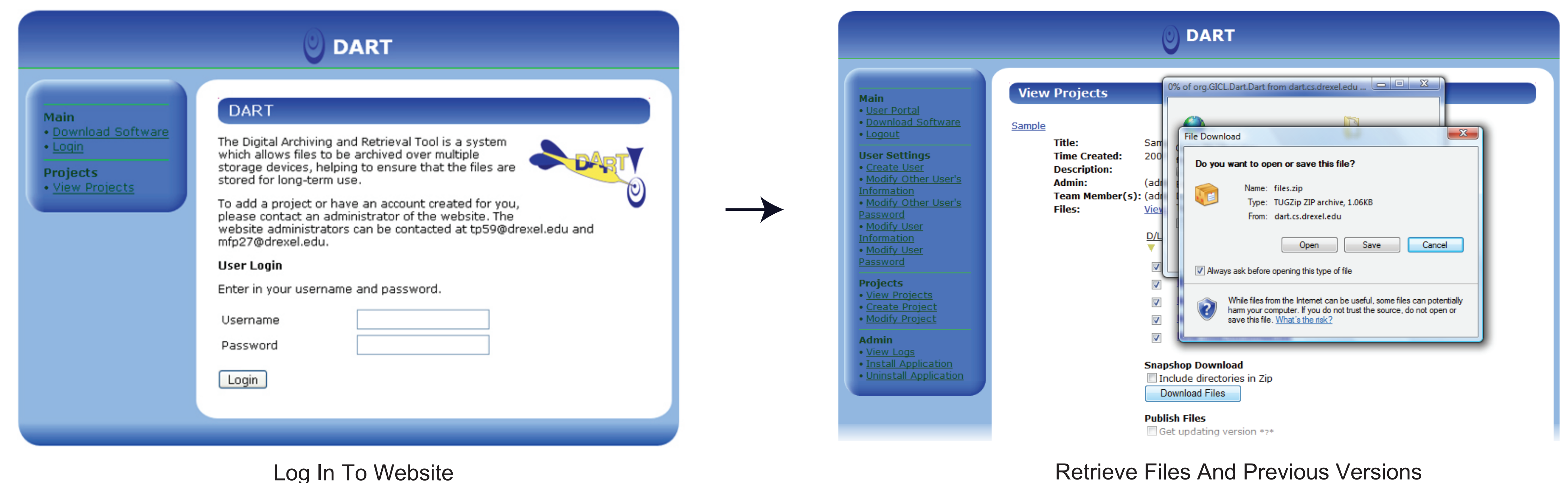
Project Objectives

• Design an application system which makes archiving and documenting all stages of the design process as easy as possible
• Backup data in as many storage resources and computers as possible to ensure data redundancy
• Capture relevant metadata such as the installed programs and running processes
• Use a modular approach for the client and server applications which may make them easier to maintain and expand
• Use the XML SOAP protocol, a textual, human-readable protocol that is also a W3C Recommendation, for communication between the client and server
• Aim for a simple user interface to make the system easy to learn

Archiving

Install Application

Set Configuration Information

Archive Files

Drag & Drop Files and Folders

Retrieval

Log In To Website

Retrieve Files And Previous Versions

Contact

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