Progress.

Progress WebClient

The Progress WebClient makes it easy to Web-enable and deploy Progress applications with a rich, graphical user interface over the Web.

HIGHLIGHTS

Thin-client solution that is ideal for providing a feature-rich, high performance interface with low network bandwidth

IntelliStream™ technology dynamically and securely delivers application components

FEATURES AT A GLANCE

– **IntelliStream™ packages and delivers applications**

– **Quick application download over the Internet, intranet or LAN**

– **Built-in security features**

– **Communicates to AppServer through HTTP/HTTPS tunneling or TCP/IP**

The Progress® WebClient with IntelliStream™ technology enables you to deploy an application with a thin client running a rich, graphical user interface—over the Internet, an intranet, or a LAN. Application developers can deploy a feature-rich client UI in the Progress 4GL and leverage the Internet for server functionality. The WebClient provides a real-time graphical client running on your end user's PC without the use of any emulation technology. With the WebClient, you don't have to trim down an application's interface and approximate it in HTML so that a Web browser can display it.

The Progress WebClient provides the same support for graphical user interfaces as the standard Progress client for Microsoft Windows. Once end users install the WebClient on their PC, they can quickly download and run your application. The WebClient requires less bandwidth to install and has a much smaller footprint than the traditional GUI client, yet it retains all of the functionality, including UI triggers and formatting, and high performance.

You can launch the WebClient either from a Shortcut or from a Web browser, but it does not actually run in the browser. The Progress WebClient runs in its own Microsoft window as a separate application, not as a traditional plug-in to a Web browser.

Easy User Installation, Speedy Deployment

Many scenarios require the ability to install software over the Internet or a LAN. An end user can install the WebClient, packaged into a self-extracting executable to be downloaded over the Internet when the user clicks on a hyperlink or an object button. Or you can distribute the WebClient and the client code for your application on a CD. It's your choice. And, how a user downloads an application is your choice. For example, your users can download all the client application code at once, or you can package your application so the user downloads only the required

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components, minimizing the amount of data actually placed on the user's disk and reducing network traffic.

Application Service Providers (ASPs) can especially benefit from the WebClient thanks to how it eases deploying applications with feature-rich interfaces over the Web. But you don't have to be an ASP to take advantage of it. For Progress developers, the WebClient is a way to deploy Internet applications with a rich UI, without having to invest in another technology. All that is required is your knowledge of developing GUI applications with the 4GL.

IntelliStream™ Packages and Delivers Applications

Progress IntelliStream is technology that makes the WebClient "smart" as it automates many deployment tasks. It includes simple and flexible installation technology that performs many common installation tasks for you. If you prefer, you can combine IntelliStream installation technology with browser-based installation utilities, such as InstallShield. It's your choice.

After an application's initial deployment, IntelliStream provides highly efficient provisioning. It enables the WebClient to determine whether the application components have changed and the application needs to be updated. Then the WebClient downloads only those changed resources to the client machine. It delivers exactly the parts of an application that end users need, when they need them.

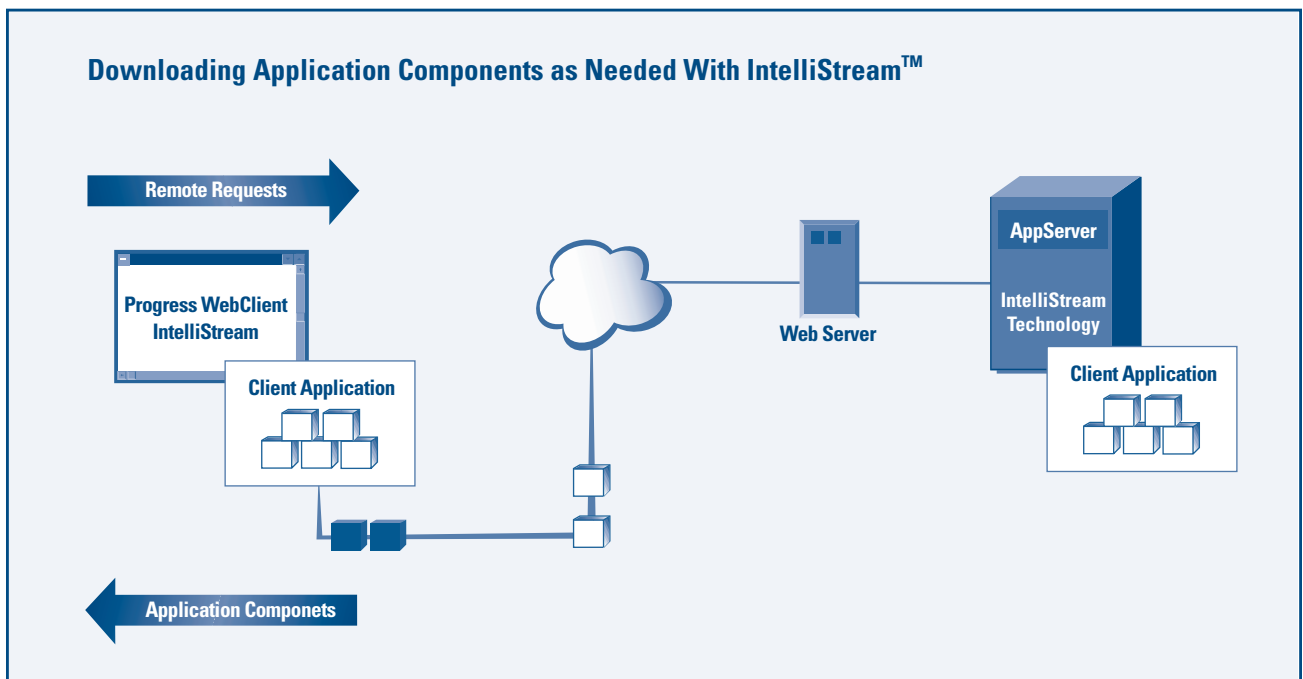IntelliStream features a flexible, server-based provisioning model. You can store application resources on a Web server or with the Progress AppServer.

IntelliStream simplifies preparing applications for deployment by providing an Application Assembler that allows you to create components that reflect how your customers will use your application.

When you make changes to source code, IntelliStream figures out which components have changed and delivers only those components to users. You also have the option of designating an upgrade as optional or mandatory, giving you and your users even more flexibility.
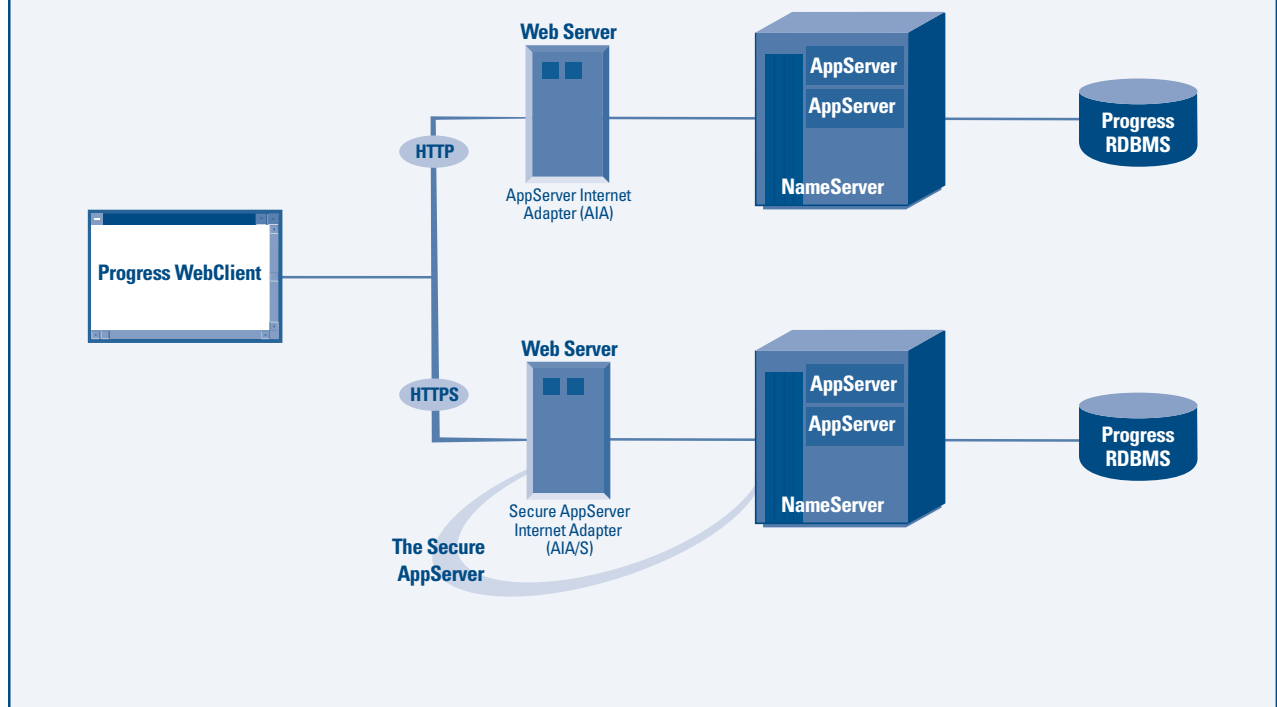
Ensure Integrity with Digital Certificates

IntelliStream also eases the implementation of various levels of security.

Downloading Application Components as Needed With IntelliStream™

Remote Requests

Progress WebClient IntelliStream

Client Application

Web Server

AppServer

IntelliStream Technology

Client Application

Application Componets

IntelliStream™ technology allows the WebClient to download or update only those application components that users need when they need them, whether over the Internet, intranet, or a LAN. This illustration shows one possible configuration where an AppServer serves as the application delivery server, but application resources can reside on a Web server instead.

Deploying Thin Client GUI Application Over the Internet

Web Server
AppServer
AppServer
NameServer
Progress RDBMS
HTTP
AppServer Internet Adapter (AIA)
Progress WebClient
Web Server
HTTPS
AppServer
AppServer
NameServer
Progress RDBMS
Secure AppServer Internet Adapter (AIA/S)
The Secure AppServer

The Progress WebClient communicates with the Progress AppServer through both HTTP and HTTPS tunneling. The Secure AppServer enables HTTPS tunneling with support for SSL encryption.

In addition to providing user authentication through the AppServer, it allows you to digitally sign your application. With digital signatures, you can address your end users' security concerns by assuring them of the application's authenticity.

Although security is a prime concern among users, some users don't like the inconvenience of multiple logins and security checkpoints. To enhance the user's experience, IntelliStream has security caching to implement "single sign-on." Single sign-on hides much of the back-and-forth traffic through security checkpoints from the user by having them provide their security information only once.

Progress AppServer Provides Scalable Architecture, Secure Communications

The Progress AppServer is the key to enabling a robust, scalable application to operate with a thin client for user presentation. The purpose of the Progress WebClient is only to run user interface code, leaving the database access and other business logic and validation functions to be done by the AppServer. This requires that an application be architected with proper separation of user interface

and business logic. But in the long-run, this separation allows you to protect the investment you've made in your business logic.

The Progress WebClient can communicate with the Progress AppServer through firewalls using HTTP tunneling. This is enabled by the AppServer Internet Adapter, which is a Java servlet that resides on a Web server. The AppServer Internet Adapter also supports HTTPS tunneling to ensure secure communications by providing support for encrypted Secure Sockets Layer (SSL) connections.

Requirements

Architecture:

– 3-tier (UI, application logic, database)
  with the business logic separated
  from User Interface.
– All database connections must be
  handled by the Progress AppServer.

Client:

– PC Windows 95/98/NT/2000
– Progress 4GL Graphical User
  Interface

Application Servers:

Progress AppServer Version 9.1B
or higher run on:

– Windows NT/2000
– Supported UNIX platforms
– IBM OS/400

Database Servers:

Progress Version 8/9 RDBMS or
Progress DataServer run on:

– Windows NT/2000
– Supported UNIX platforms
– IBM OS/400

Internet, Extranet, Intranet:

If you want to implement HTTP tunnel-
ing, you must have the Progress
AppServer Internet Adapter (AIA),
which ships with the Progress
AppServer. For HTTPS (with SSL)
tunneling support, you must have
the Progress AIA/S.

LAN:

The Progress WebClient can be
deployed as a client over a Local Area
Network without the use of a Web
server.

AIA and AIA/S:

A Web server that supports a Java
Servlet Engine (JSE), including:

– Tomcat 3.1 on Apache Server 1.3.9
– ServletExec 2.2 and 3.0 or JRun 2.3.3
  and 3.0 on iPlanet/Netscape or
  Microsoft IIS Servers

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