

pGina Plugin Interface Definition – Version 1.6 – (1-23-2003)

The following function descriptions provide documentation for the required functions of a pGina plugin. Any pGina authentication plugin **MUST** export these methods in the C calling convention (non-mangled names) even if the method is not implemented beyond returning any required values. In addition, all plug-ins for pGina 1.3 and higher **MUST** support UNICODE. The source code for the DummyPlugin included with pGina is included in the SDK for your benefit.

As of version 1.6.0 the pGinaInfo structure is backward compatible, but should be defined as:

```
typedef struct pGinaInfo {
    LPTSTR pathMSGina;
    LPTSTR pathPlugin;
    LPTSTR pathProfile;
    LPTSTR mapPaths;
    LPTSTR Username;
    LPTSTR Password;
    LPTSTR homeDir;
    BOOL isAdmin;
    BOOL disabled;
    int authType;
    HANDLE hUser;
    LPTSTR userGroups;
    BOOL allowPassChange;
    LPTSTR errorString;
    LPTSTR defaultDomain;
    BOOL Reserved3;
    BOOL Reserved4;
} pGinaInfo ;
```

The only members a plugin should change are:

mapPaths = Specifies a set of drive mapping parameters. This value may already contain some settings from the registry, so care should be taken to NOT overwrite these.

isAdmin = A Boolean indicating whether the user should be added to the local administrators group upon login

userGroups = Specifies a set of groups (semicolon separated) that the user should be added to

allowPassChange = A Boolean indicating whether the user should be allowed to attempt password changes

errorString = An errorstring that is displayed should login fail.

defaultDomain = the domain name or server address to perform user functions on (when left alone, the default is the local machine).

UserLogin()

The UserLogin() method is called by the PGINA.DLL when a user requests to be authorized for login. It accepts both a username and password as parameters and returns a boolean value indicating the success or failure in authenticating the requested user. The pGinaInfo structure can be used to add per-user drive mappings and settings.

BOOL UserLogin(

```
    LPTSTR Username, // Username passed as a string
    LPTSTR Password  // Password passed as a string
    pGinaInfo *settingsInfo // Structure containing GID etc
);
```

Return Value	Meaning
TRUE	Username and password are correct and authentication is finished – allow GINA to continue login process
FALSE	Username and/or password is correct and login should NOT continue.

ChangeUserPassword()

The ChangeUserPassword() method is called by the PGINA.DLL when a user requests to change their password and their new password has been verified. It accepts the username, old password, and new password requested by the user as parameters and returns a boolean value indicating whether the change in password took place or not. PGINA will NOT display any error messages, it is the responsibility of this method to display error dialogs or messages appropriate to any errors encountered.

```
BOOL ChangeUserPassword(
    LPTSTR Username, // Username passed as a string
    LPTSTR OldPassword, // User's old password
    LPTSTR Password // User's new password
);
```

Return Value	Meaning
TRUE	Password change took place successfully
FALSE	Password change failed.

AboutPlugin()

The AboutPlugin() method is called by PGINA.DLL to obtain any copyright or about string that will then be displayed within the login dialog box(es). It accepts no parameters and returns a constant string containing any information the plugin author wishes to be displayed.

```
LPCTSTR AboutPlugin(
    VOID
);
```

Value	Meaning
LPCSTR	Constant string containing copyright and author information.

ChangePluginSettings()

The ChangePluginSettings() method is called by a program when an Administrator wants to setup or change configurable options for the plugin. An interface for doing so should be provided with this method and solely within this method.

```
VOID ChangePluginSettings(
    VOID
);
```

Value	Meaning
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NONE	No return values
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LoginHook()

The LoginHook() method is called by PGINA.DLL when a login has been authorized as successful and the user is being logged in. This provides an interface for the plugin to perform other operations after user authentication and before the user's desktop has been provided.

```
VOID LoginHook(
    PGinaInfo *settingsInfo
);
```

Value	Meaning
NONE	No return values

LogoutHook()

The LogoutHook() method is called by PGINA.DLL when a login has been authorized as successful and the user is being logged out. This provides an interface for the plugin to perform other operations after user authentication and before the user is fully logged out.

```
VOID LogoutHook(
    PGinaInfo *settingsInfo
);
```

Value	Meaning
NONE	No return values

IsRequired()

The IsRequired() method is an option (1.6.0 and higher) method, when called by PGINA.DLL the returned value indicates whether the plugin is required. If the plugin is required, pGina will only check the local SAM if the login is a local administrator – all other account (regardless of local availability) fail.

```
BOOL IsRequired( VOID );
```

Return Value	Meaning
TRUE	The plugin is required
FALSE	The plugin is NOT required