Chapter 3 Basic Procedures of INTERGLAD Ver. 7

System Installation and Initial Setting 1
A. Start-up10
[Standard Edition]
Q31 Expired and unusable
Q32 Updated but it does not start
Q33 Does not start after installation
Please follow the manual, Chapter 3 system installation and initial setting.
Setting procedure
2. Procedure for Standard edition [Page 3-5]
4. Procedure of Update for Standard and CD full function edition [Page 7-8]
Important point
[Expiration]
· Ver 7.5.0 or earlier version has expired, so please update to the new version.
(The next expiration version is Ver 7.5.2 Expiration: March 31, 2019)
(In the version 7.7.0, notification function was added one month before expiration)
[Update]
· If you do not uninstall the old version, an error massage appears on the way.
· The rewritten batch file is reset.
4) Rewrite batch file [Page 4]
· DB setting is not done
Refer to "Manual Chapter 4 1.2 [Main] window [Page 2-4] .
· Proxy setting is incorrect
Refer to "Manual Chapter 4 1.2 [Main] window [Page 2-,3].
· User data file
Save the user data file before updating.
[Installation]
· Rewrite the batch file

[Page 4] [Internet Edition]

4) Rewrite batch file

ter 4.

System Installation and Initial Setting

Required procedures are different with INTERGLAD types (Internet edition, Standard edition, CD full function edition). In addition, available functions are different with Java version used. Refer the following list.

Application Types of INTERGLAD Ver. 7

1. Internet edition Without system install, full functions except file operation and User Data are available with the latest data.

	Internet Connection	Authenti- cation	Java (32bit)	Available Database ¹			Availab	PC					
System Install					Search	Analysis	Prediction /Design	Print ²	File User Data		Rewrite of	Batch File	
									/Export ³	_	OS	Win 32bit	Win 64bit
Required	Required	Server (ID, PW)	Ver. 7	Server DB	Yes	Yes	Yes	Yes	No	ı	Windows Linux Mac OS X	-	-

2. Standard edition Full functions are available with the latest data (for Java Ver. 7). Full functions except User Data are available with the latest data (for Java Ver. 8).

System Install	Internet Connection	Authenti- cation	Java (32bit)				Availab	PC					
					Search	Analysis	Prediction /Design	Print ²	File	User Data		Rewrite of Batch File	
									Import /Export ³	Conversion /Registration		Win 32bit	Win 64bit
Required		ired Server (ID, PW)	Ver. 7	Server DB	Yes	Yes	Yes	Yes	Yes	=	Linux* Mac OS X* (* only for Server DB) Requ	Required ⁵ R	
	Required			Local DB	Yes	Yes	Yes	Yes	Yes	-			Required ⁶
				User DB	Yes	Yes	Yes	Yes	Yes	Yes			
				Server DB	Yes	Yes	Yes	Yes	Yes	-			Not Required
				Local DB	No	No	No	No	No	-			
				User DB	No	No	No	No	No	No			Required
Temporary				Server DB	Yes	Yes	Yes	Yes	Yes	-		NY .	
System ⁴				Local DB	Yes	Yes	Yes	Yes	Yes	-	Linux	Not Required	Not Required
Decompress				User DB	Yes	Yes	Yes	Yes	Yes	No	Mac OS X	required	Required

3. CD Full Function edition Without internet connection, full functions are available (for Java Ver. 7). Without internet connection, full functions except User Data are available (for Java Ver. 8).

System Install	Internet Connection	Authenti- cation	Java (32bit)	Available Database ¹			Availab	PC					
					Search	Analysis	Prediction /Design	Print ²		User Data		Rewrite of Batch File	
									Import /Export ³	Conversion /Registration	OS	Win 32bit	Win 64bit
Required			Ver. 7	Local DB	Yes	Yes	Yes	Yes	Yes	=	Windows	Required ⁵	Required ⁶
	Not Required	Access Key		User DB	Yes	Yes	Yes	Yes	Yes	Yes			
				Local DB	No	No	No	No	No	-			
				User DB	No	No	No	No	No	No		-	-
Temporary				Local DB	Yes	Yes	Yes	Yes	Yes	=	Windows	Not	Not
System ⁴ Decompress				User DB	Yes	Yes	Yes	Yes	Yes	No	Linux Mac OS X	Required	Required

1 Available Database

Server DB: Database stored in the INTERGLAD server of the NGF, available with the latest data any time.

Local DB: Database installed on the user's PC from the Web page or CD by the NGF, renewed every year.

User DB: Database in which the user registered his/her own data on the user's PC, available for use such as search along with the Server DB or Local DB.

² Print: Prints of tables and figures as searched results, etc. are available.
3 File Import/Export: Data- and image-save/open are available for search conditions, search results, analysis results, prediction results, etc.

⁴ Temporary System: INTERGLAD system using JDBC and UcanAccess for Java Ver. 8, which has been made temporarily, because Java Ver. 8 does not have the access function to ODBC date source.

⁵ Rewrite of the batch file for Win 32bit PC: java- "c:\Program Files\Java\jre7\bin\java.exe" (Not Required only with Java Ver. 7)

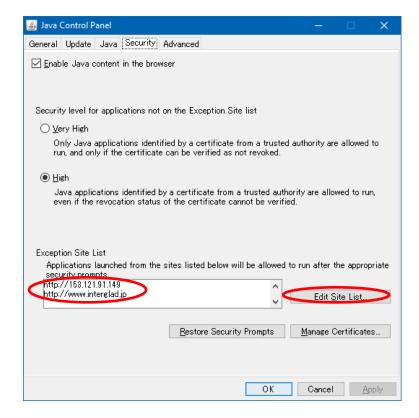
 $^{6 \} Rewrite \ of \ the \ batch \ file \ for \ Win \ 64bit \ PC: java \rightarrow \ "c:\ Program \ Files \ (x86)\ Java\ jre7\ bin\ java.exe" \ (Required \ even \ only \ with \ Java \ Ver. \ 7)$

INTERGLAD system is composed of Property Database and Structure Database. The Structure Database does not have functions of prediction/design and user data, and it is only english version.

- 1. Procedure for Internet Edition
- 2. Procedure for Standard Edition
- 3. Procedure for CD Full Function Edition
- 4. Procedures of Update for Standard and CD Full Function Edition
- 5. Procedure for Change of Connection IP Address for New Server The procedures are explained for Windows 10 as an example.

1. Procedure for Internet Edition

Internet edition can be used only by installing of Java (Version 6 or newer). Refer to 2. 2). For Windows 10, etc. the following procedure is required. Open the Control Panel and select Java. On the [Security] window of Java Control Panel, check "Enable Java content in the browser," and add "http://153.121.91.149" and "http://www.interglad.jp" in the Exception Site List by clicking the [Edit Site List] button. For Internet Edition, URL http://153.121.91.149/interglad7 or http://www.interglad.jp/interglad7/ can be used, and the addition in the Exception Site List corresponding to the URL is necessary. Microsoft Edge and Google Chrome are unable to use, because they do not work for Java. Refer to 4. 2) c. of Chapter 2. for the details of the Web browser.



Java Control Panel [Security] window

For start-up of Internet Edition, open the [INTERGLAD WEB] page by setting,

http://153.121.91.149/interglad7/ or http://www.interglad.jp/interglad7/. This page can be opened also from NEW GLASS FORUM Web site by clicking [Ver. 7 Internet edition] of [Access to INTERGLAD] in the right-hand side menu followed by opening the [INTERGLAD 7] page. Input the User ID and Password in each box at the left side of the window, and click the [LOGIN] button. When some dialogues appear, proceed as follows.

- 1) Java was blocked because it is out of date and needs to be updated. →Run this time
- 2) To display the webpage again, the web browser needs to resend the information you've previously submitted. \rightarrow Retry
- 3) Your java version is out of date. →Later
- 4) Do you want to run this application? \rightarrow Run

The [Main] window of INTERGLAD appears under the window of INTERGLAD WEB. Start INTERGLAD by setting the [Main] window upside.

2. Procedure for Standard Edition

1) Check Operating System 32 bit or 64 bit

The user can distinguish if the OS of his/her PC is 32-bit or 64-bit in the [System] window from [System and Security] of [Control Panel].

2) Install Java

Download and install Java on the user's PC from the following Web page.

http://www.java.com/en/download/ie manual.jsp

By this procedure usually the newest Java Version 8 of 32-bit is installed. Java Version 7 or former has access function to ODBC data source, but Java Ver. 8 does not have it. Therefore when only Ver. 8 is installed, the user cannot use the Local Database and User Database. For use of full functions of INTERGLAD, install Java Ver. 7 (32-bit) from the following Web page, since the public update by Oracle Corp. has already finished (4.2015).

http://www.oracle.com/technetwork/java/javase/downloads/java-archive-downloads-javase7-521261.html#jre-7u80-oth-JPR

Windows x86 Offline: jre-7u80-windows-i586.exe

For this, create a free Oracle Account, and the user can download and install it by inputting the Username and Password.

When Java Ver. 7 is already in the PC, take care not to uninstall it. The user can utilize acquisition support by Oracle for necessity of security. All functions except the functions of User Data are available by installing only Ver, 8.

3) Install INTERGLAD system

① Open the following INTERGLAD Web page, and click the [LOGIN] button after inputting your User ID and Password. Then the [Downloads] page opens.

http://www.interglad.jp/interglad7/download/

This Web page can be opened also from NEW GLASS FORUM Web site by clicking [Ver. 7 Standard edition system download] of [Access to INTERGLAD] in the right-hand side menu followed by opening the [INTERGLAD 7] page.

② Choose the Windows Installer "interglad-7.*.*.*-setup-win.exe" for Windows 10 (the same for 7, 8, Vista) and install it on the user's PC. Occasionally the user needs to stop or lower the security level of the PC for installing. For instance, when Windows SmartScreen is active on Windows 10, he/she has to cancel the protection once. In some environments, inputting ID and Password of the PC manager are necessary.

For Mac OS X/ Linux, download and decompress "interglad-7.*.*.*.zip."

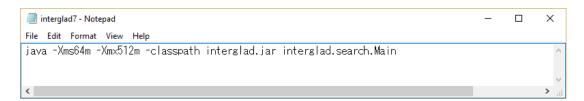
4) Rewrite the batch file [interglad7] for use of Java Ver. 7

This rewrite is necessary for use of Java Ver. 7 and 8 together on 32-bit PC, and for use of Java Ver. 7 and 8 together, or only Java Ver. 7 on 64-bit PC. It is not necessary for only Java Ver. 8.

- ① By right-clicking the [INTERGLAD7.6] icon on the desktop, select [Edit] of the [interglad7] file.
- ② Rewrite the batch file and save it. The code letters should be ANSI.

Before rewrite:

java -Xms64m -Xmx512m -classpath interglad.jar interglad.search.Main (Window below)



For 32-bit PC rewrite as follows.

"c:\Program Files\Java\jre7\bin\java.exe" -Xms64m -Xmx512m -classpath interglad.jar interglad.search.Main

For 64-bit PC rewrite as follows.

"c:\Program Files (x86)\Java\jre7\bin\java.exe" -Xms64m -Xmx512m -classpath interglad.jar interglad.search.Main

Copy and paste of rewrite letters above is convenient.

5) Start-up of INTERGLAD

Double-click the [INTERGLAD 7.6] icon on the desktop of the PC, and the [Main] window of INTERGLAD opens. Input the User ID and Password of INTERGLAD and click the [OK] button, and the user can perform search and all other functions. Inputting the User ID and Password is necessary in each starting of the system. Open the [Preference] window from the [Preference] icon on the top menu bar of the [Main] window, and select the [Server] radio button of the [INTERGLAD Data]. In the use of Java Ver. 8, [Cannot connect local database....] dialog appears 4 times at start-up, then click the [OK] button in each dialog. In the use of Java Ver. 7, such a dialog does not appears.

6) Provisional version applicable for Java Ver. 8

The provisional version applies JDBC and UCanAccess software complementally for access function to ODBC database. In this version the full functions except registration and conversion of User Data are available. Preregistered User Data are available for search and prediction with Server Data.

To apply this version, first open the [Downloads] page by procedure of 3) ①, and click [User Environment of INTERGLAD]. Download and decompress [INTERGLAD 7.*b] "interglad-7.*.*.*b.zip" in 2 (2) of the opened page. INTERGLAD starts up by double-clicking the [interglad7] on the desktop, shortcut icon of "interglad7.bat" in the [INTERGLAD 7.5b] folder. For the first start-up it takes time, around 10 minutes.

3. Procedure for CD Full Function Edition

1) Check Operating System 32 bit or 64 bit

The user can distinguish if the OS of his/her PC is 32-bit or 64-bit in the [System] window from [System and Security] of [Control Panel].

2) Install Java

Install Java Ver. 7 (32-bit) from the following Web page.

http://www.oracle.com/technetwork/java/javase/downloads/java-archive-downloads-javase7-521261.html#jre-7u80-oth-JPR

Windows x86 Offline: jre-7u80-windows-i586.exe

For this, create a free Oracle Account, and the user can download and install it by inputting the Username and Password.

Java Version 7 or former had access function to ODBC data source, but Java Ver. 8 does not have it. Therefore when only Ver. 8 is installed, the user cannot use this

common CD Full Function Edition which needs the Local Database. When the user have to use only Java Ver. 8, refer to 3. 6). Take care not to uninstall Java Ver. 7 at Java update. The user can utilize acquisition support by Oracle for necessity of security.

3) Install INTERGLAD system

Choose the Windows Installer "interglad-7.*.*.*-sa-setup-win.exe" for Windows 10 (the same for 7, 8, Vista) in the CD from the NGF and install it in the user's PC. Occasionally the user needs to stop or lower the security level of the PC for installing. For instance, when Windows SmartScreen is active in Windows 10, he/she has to cancel the protection temporarily. In some environments, inputting ID and Password of the PC manager are necessary.

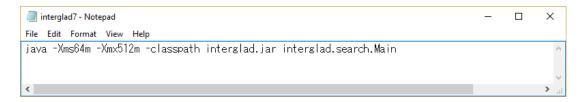
4) Rewrite the batch file [interglad7]

This rewrite is necessary for use of Java Ver. 7 and 8 together on 32-bit PC, and for use of Java Ver. 7 and 8 together, or only Java Ver. 7 on 64-bit PC.

- ① By right-clicking the [INTERGLAD7.* SA] icon on the desktop, select [Edit] of the [interglad7] file.
- ② Rewrite the batch file and save. The code letters should be ANSI.

Before rewrite:

java -Xms64m -Xmx512m -classpath interglad.jar interglad.search.Main (Window below)



For 32-bit PC rewrite as follows.

"c:\Program Files\Java\jre7\bin\java.exe" -Xms64m -Xmx512m -classpath interglad.jar interglad.search.Main

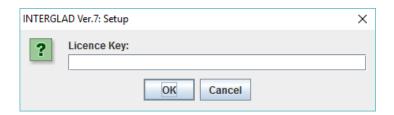
For 64-bit PC rewrite as follows.

"c:\Program Files (x86)\Java\jre7\bin\java.exe" -Xms64m -Xmx512m -classpath interglad.jar interglad.search.Main

5) Start-up of INTERGLAD

Double-click the [INTERGLAD 7.* SA] icon on the desktop of the PC, and the [Main] window of INTERGLAD opens with [INTERGLAD Ver. 7: Setup] dialog box

(below). Input the license key in the dialog box, and click the [OK] button. The user can perform search and all other functions.



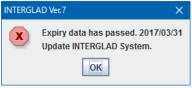
6) Provisional version applicable for Java Ver. 8

The provisional version applies JDBC and UCanAccess software complementally for access function to ODBC database. In this version the full functions except registration and conversion of User Data are available. Preregistered User Data are available for search and prediction. To use this version, download and decompress "interglad-7.*.*.*b-sa.zip" in the CD which has been sent by NGF on the user's PC. By double-clicking the [interglad7] batch file, INTERGLAD starts up. For the first start-up it takes time, around 10 minutes.

4. Procedures of Update for Standard and CD Full Function Edition

For the Standard Edition, click [Check Update] of the [Help] pulldown menu on the menu bar of the [Main] window, and the [INTERGLAD Downloads] webpage opens. When a new version appears on the page, update to the new version of Ver. 7 by the following procedure 2)~9),

When a dialog below appears, update the Standard Edition by the following procedure.



- 1) Open the [INTERGLAD Ver. 7] page in the website of NEW GLASS FORUM. Click [Ver. 7 Standard edition system download] of [Access to INTERGLAD] in the menu on the right side of the page. Input the User ID and Password and click the [LOGIN] button. Next click [Download].
- 2) Choose the Installer of the newest version fit to the OS of the PC on the [INTERGLAD Downloads] page, download and save it in the user's PC.

For Windows 10 (Vista, 7 or 8), interglad-7.*.*.*-setup-win.exe Provisional version applicable for Java Ver. 8 is also available. Refer to 2. 6).

3) When the PC has data registered in the User Database, save the user data file with

registered data, MDB File (Glass Property) "GP_user_7*.mdb" before update. The user data file is in the following folder as default, and transfer it to the desktop, etc.

Windows 10 (Vista, 7 or 8), C:\INTERGLAD 7.0\GP_user_7*.mdb (Windows XP,

C:\Program Files\New Glass Forum\INTERGLAD 7.0\GP_user_7*.mdb)

- 4) Uninstall the [INTERGLAD 7.*] system in the [Programs and Features] window from the [Control Panel]. If the user tries to update without uninstallation of the system, an [Error] massage appears on the way.
- 5) To use all functions including functions of User Data, Java Ver. 7 (32 bit) is necessary. When Java Ver. 7 is not in the PC, install it. All functions except the functions of User Data (conversion, registration and use for search) are available, when Java Ver. 8 (32 bit) is installed in the PC. Refer to 2. 2).
- 6) Install INTERGLAD by double-clicking the saved installer by 2) on the PC.
- 7) When Java Ver. 7 is used, open [interglad7 Notepad] window by right-clicking the [INTERGLAD 7.*] icon and then selecting [Edit], and rewrite the phrase. Refer to 2. 4).
- 8) Place the saved user data file by 2) in the new [INTERGLAD 7.0] folder. When the saved file is "GP_user_76.mdb," the new file "GP_user_76.mdb is replaced to the saved file.,
- 9) When the user data file is "GP_user_7*.mdb (*: 5 or less), convert it to "GP user 76.mdb". Refer to 6.1 (2) (F) in Chapter 4.
- 10) Start-up INTERGLAD by double-clicking the [INTERGLAD 7.6] icon. Open the [Preference] dialog box, and select the newest MDB Files of Local Database and User database and click the [OK] button.

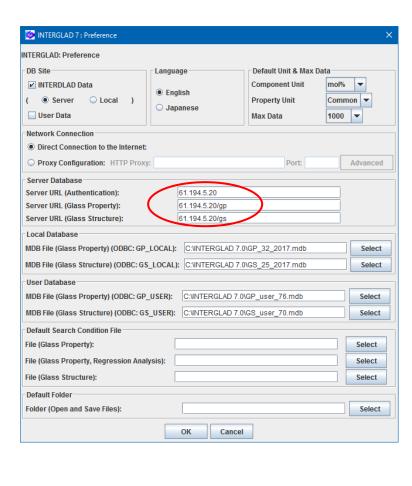
For the CD Full Function Edition, perform the above procedure of 2)-10). Here in 2), the installer of the new version is in the CD sent by NGF, and the Windows Installer is "interglad-7.*.*.*-sa-setup-win.exe." In 3), 4) and 8), [INTERGLAD 7.0] is replaced to [INTERGLAD 7.0 SA]. In 7) and 10), the [INTERGLAD 7.6] icon is replaced to the [INTERGLAD 7.* SA] icon.

5. Procedure for Change of Connection IP Address for New Server

The INTERGLAD server has been replaced by new one in May 23, 2017. Therefore the user of the Standard Edition has to change the connection IP address by the following procedure. Without the change the user cannot use the Standard Edition.

- 1) After starting-up the Standard Edition, when a dialog "Cannot Connect INTERGLAD Server. Set up Network Configuration." appears, click the [OK] button. And the [Preference] dialog box opens.
- 2) Change the IP address from "61.194.5.20" to "153.121.91.149" or "www.interglad.jp" as shown in figures.
- 3) Click the [OK] button.

Only one time IP Address change is required.



[Preference] dialog box Before renewing

After renewing	Server Database	
	or	
	Server Database	
	Server URL (Authentication): www.interglad.jp	
	Server URL (Glass Property): www.interglad.jp/gp	
	Server URL (Glass Structure): www.interglad.jp/gs	

For the Internet Edition, add "http://153.121.91.149" or "http://www.interglad.jp" to the Exception Site List in the [Security] window of the Java Control Panel. Refer 1

Chapter 4 Detailed explanation of windows and operation

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1. Main window and common features

1.1 Common features

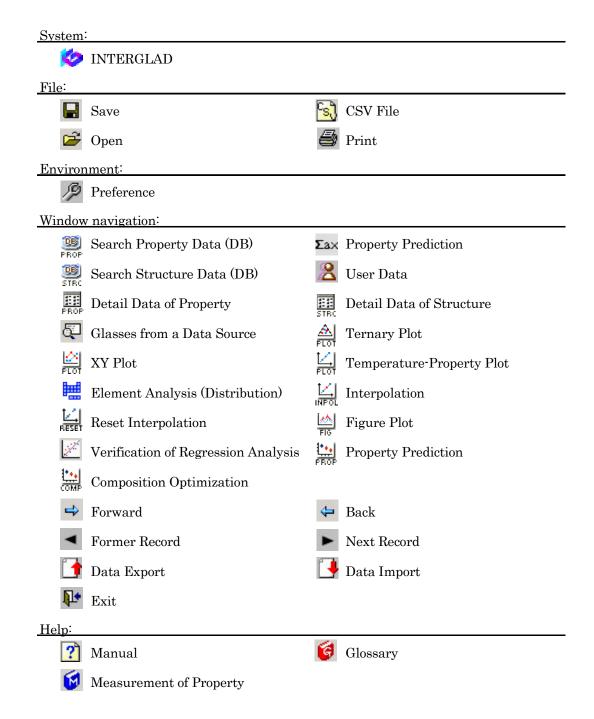
All INTERGLAD windows share the following features.

(1) Menu bar

The menu bar has pulldown menus called File, View, Tools, and Help.

(2) Icon menu

The icon menu on the toolbar at the top of the screen includes the following icons.



1

(3) Input and selection

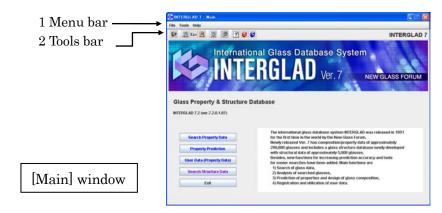
There are four modes of data input and item selection to the screen:

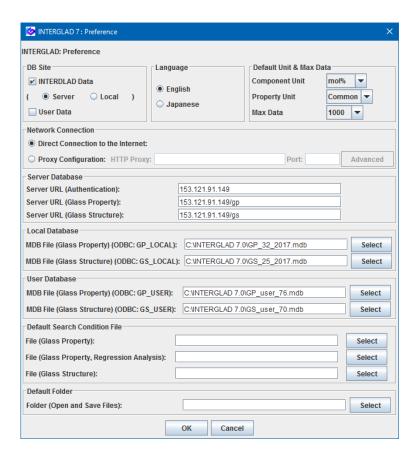
- Free input (white cells): The user can input numerical values or text using the keyboard, and numerical values can be either fixed-point numbers or indices (exponential style). Decimal points of numerical value should be period (.), not comma (,).
- **Selection from a list** (light-blue cells): The user can choose items from a fixed list using the dialog boxes that open after double-clicking any light blue cell.
- **Selection by pulldown menu**: When the user clicks a button that contains a down arrow (**V**), he/she can select an item from the available list of items.
- **Checkboxes**: Items are selected or deselected by clicking the appropriate checkboxes.
- **Balloon**: Explanation appears by pointing an item with a mouse-pointer.

1.2 [Main] window

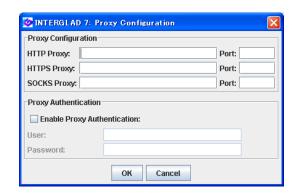
The [Main] window appears when INTERGLAD Ver. 7 is started.

(1) Window configuration





[Preference] dialog box



[Proxy Configuration] dialog box

(2) Details

Select the functions called Search Property Data, Property Prediction, User Data, or Search Structure Data using buttons in the [Main] window. The users can know the numbers of datasets clicking Contents of Property Data, Contents of Structure Data, or Contents of Glass-Forming Region of Tools on the menu bar. From the Search Property Data, the numbers of glasses of each State, Appearance, Feature, Process, Usage, Data Source, Component, Glass System and Property are shown by developing the list. From the Search Structure Data, the number of glasses of each State, Shape, Measurement, Data Source, Component, Glass System and Structure is shown. From the Contents of Glass-Forming Region the user can know the numbers of the composition with 2 or 3 components. Clicking [Check Update] of Help opens the web-page for download of the new version of INTERGLAD.

The [Preference] icon poens a dialog box that allows the user to modify the user environment. The [Exit] button closes INTERGLAD.

The following options are available in the [Preference] dialog box. Click the [OK] button to fix the conditions, and click the [Cancel] button to cancel the conditions in this dialog box.

1) Database (DB) Site

- To use INTERGLAD data, check the [INTERGLAD Data] checkbox and select either the [Server] or [Local] radio button. The Server option links to the database stored on the New Glass Forum server, and the Local option links to the local database stored on the user's computer. The local database can be downloaded from the Web page of INTERGLAD or installed from the INTERGLAD CD. The local database is renewed at least once a year.
- To use the INTERGLAD data with User Data, check both the [INTERGLAD Data] and the [User Data] checkboxes. Here, User Data refers to the user database registered on the user's computer.
- To use the User Data alone, select only the User Data option.

2) Language

Choose a language by clicking on either the English or the Japanese radio button.

3) Default Unit & Max Data

- Select a Component Unit from the pulldown menu.
- Select a Property Unit from the pulldown menu. Common refers to the most commonly used unit, shown in the ID list of 5.1, Chapter 6.
- Select a maximum number of glasses for the search from the [Max Data] pulldown menu.
- Do not change the default settings unless necessary.
- These settings can also be changed from the [Search Property Data] window.

4) Network Connection

- Select a network connection method.
- If using a proxy server, select the proxy configuration. Clicking the [Advanced] button opens the [Proxy Configuration] dialog box and input the IP address and Port in the dialog box. When Proxy Authentication is reqired, check the [Enable Proxy Authentication] checkbox, input the User ID and the Password, and click the [OK] button.

5) Server Database

• The Server Database to search for property or structure can be checked and changed. However, usually, these settings do not need to be changed.

6) Local Database

• The Local Database to search for property or structure can be checked and changed. Click the [select] button and select an mdb file for the database. Usually, these settings do not need to be changed. The file codes are set to ODBC for the local databases.

7) User Database

• The user can select a registered user database to search when two or more user database files are stored on the local computer. Usually, these settings do not need to be changed.

8) Default Search Condition File

- A default search condition can be selected from the stored search conditions on the user's computer.
- The default file can be set for each of Property/Search, Property/Multiple Regression Analysis, and Structure/Search.

9) Default Folder

• The user can select a default folder in which to save a search, analysis, or prediction data.