

CREATEGUID	Guid :=CREATEGUID() Use this function to create a new unique GUID. The value can then be assigned to a GUID data type or a text data type. Use the text data type if you want to compare the GUID to another text string.
ISNULLGUID	Ok := ISNULLGUID(Guid) Use this function to check whether or not a value has been assigned to a GUID. A null GUID that consists only of zeros is valid but must never be used for reference purposes.

INSTREAM & OUTSTREAM

The InStream (input stream) and OutStream (output stream) data types are generic stream objects that you can use to read from or write to files and BLOBs. In addition, the InStream and OutStream data types enable data to be read from and sent to objects of the types Automation and OCX. The Microsoft XML DOM can read from an InStream object and write to an OutStream object.

InStream.EOS	IsEOS:= InStream.EOS() Use this function to find out whether or not an input stream has reached End of Stream (EOS).
InStream.READ	[(Read):=] InStream.Read(Variable, [Length]) Use this function to read a specified number of bytes from an InStream object. Data is read in binary format.
InStream.READTEXT	[(Read):=] InStream.ReadText(Text, [Length]) Use this function to read text from an InStream object. READTEXT reads the specified number of bytes, the maximum length of the string or until the end of the line. Data is read in text format.
OutStream.WRITE	[(Written):=] OutStream.Write(Variable, [Length]) Use this function to write a specified number of bytes to the stream. Data is written in binary format.
OutStream.WRITETEXT	[(Written) :=] OutStream.WriteText([Text, [Length]]) Use this function to write text to an OutStream object. Data is written in text format.

KEY GROUPS

After you have assigned a key of a table to one or more key groups, you can selectively activate or deactivate the key by enabling and disabling the key groups.

KEYGROUPDISABLE [5.0]	[Ok :=] KEYGROUPDISABLE(GroupName) Use this function to disable a key group.
KEYGROUPENABLE [5.0]	[Ok :=] KEYGROUPENABLE(GroupName) Use this function to enable a key group.
KEYGROUPENABLED [5.0]	[Ok :=] KEYGROUPENABLED(GroupName) Use this function to check whether or not a specific key group is enabled.

KEYREF

This complex data type identifies a key in a table and the fields in this key. This gives you access to the key and the fields it contains. The keyref object can refer to any key in any table in the database.

ACTIVE	Ok := KeyRef.ACTIVE Use this function to find out if the key is enabled or not.
FIELD COUNT	No := KeyRef.FIELD COUNT Use this function to return the number of fields that have been defined in a key. These functions returns an error if no key is selected.
FIELD INDEX	FieldRef := KeyRef.FIELD INDEX(Index) Use this function to return the fieldref of the field that has this index in the key referred to by the keyref variable.
RECORD	RecordRef := KeyRef.RECORD Use this function to return the recordref of a key. This function returns an error if no key is selected.

NUMERIC

The following numeric data types exists: BIGINTEGER, DECIMAL, INTEGER.

ABS	NewNumber := ABS(Number) Use this function to calculate the absolute value of a number. ABS always returns a positive numeric value or zero.
POWER	NewNumber := POWER(Number, Power) Use this function to raise a number to a power.
RANDOM	Number := RANDOM(MaxNumber) Use this function to return a pseudo-random number.
RANDOMIZE	RANDOMIZE([Seed]) Use this function to generate a set of random numbers, from which RANDOM will select a random number. "Seed" is a number RANDOMIZE uses to create a unique set of numbers. If you use the same number as seed, you get the same set of numbers generated. If you omit this optional parameter, RANDOMIZE uses the current system time (total number of milliseconds since midnight). NewNumber := ROUND(Number [, Precision] [, Direction]) Use this function to round the value of a number variable. The optional parameter "Precision" determines the precision used when rounding. The default value is 0.01 for the US version. In other countries/regions, other default values may be used. The optional parameter "Direction" tells the system how to round Number. The default rounding method is '='. There are three different options for rounding: '=', '>', '<'
ROUND	

RECORD

This complex data type corresponds to a row in a table. Each record consist of fields (which form the columns of the table). A record is typically used to hold information about a fixed number of properties.

ADDLINK [5.0]	[ID :=] ADDLINK(URL[, Description]) Use this function to add a link to a record. Every time you add a link to a form or a table an entry is created in the Record Link system table. The URL can be a link to a Web site, a file stored on the local or on a remote computer, or a link to a Dynamics NAV form.
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ASCENDING	[IsAscending] := Record.ASCENDING([SetAscending]) Use this function to change or check the order in which the system will search through a C/SIDE table.
CALCFIELDS	[Ok :=] Record.CALCFIELDS(Field1, [Field2],...) Use this function to update the FlowFields in a record.
CALCSUMS	[Ok :=] Record.CALCSUMS(Field1, [Field2],...) Use this function to calculate the total of a column of SumIndexFields in a C/SIDE table.
CHANGECOMPANY	[Ok :=] Record.CHANGECOMPANY([CompanyName]) Use this function to redirect references to table data from one company to another. The CHANGECOMPANY function is not affected by RESET. You can deselect a company by making a new call to CHANGECOMPANY or by using CLEAR.
CLEARMARKS	Record.CLEARMARKS Use this function to remove all marks on a record.
CONSISTENT	Record.CONSISTENT(Consistent) Use this function to mark a C/SIDE table as being consistent or inconsistent from an administrative point of view, which you define. Normally this function is only used for accounting routines. If your accounts do not balance, the accounts are inconsistent.
COPY	Record.COPY(FromRecord) Use this function to copy a record from a table. All filters, marks, and keys are included in the copy.
COPYFILTER	Record.COPYFILTER(FromField, ToRecord.ToField) Use this function to copy the filter set for one field and apply it to another field.
COPYFILTERS	Record.COPYFILTERS(FromRecord) Use this function to copy all filters set by SETFILTER or SETRANGE from one record to another.
COPYLINKS [5.0]	COPYLINKS(FromRecord) Use this function to copy all the links from a particular record.
COUNT	Number := Record.COUNT Use this function to count the number of records in a C/SIDE table. This function returns the number of records that meet the conditions of any filters associated with the records.
COUNTAPPROX	Number := Record.COUNTAPPROX Use this function to obtain an approximate count of the number of records in the table, for example, for updating progress bars or displaying informational messages. The count is approximate because it uses statistical information maintained by SQL Server, which is not kept precisely in synchronization with modifications to the table and is not under transaction control.
CURRENTKEY	CurrentKey := Record.CURRENTKEY Use this function to return the current key of a database table.
DELETE	[Ok :=] Record.DELETE([RunTrigger]) Use this function to delete a record in a C/SIDE table. The optional boolean parameter "RunTrigger" lets you run the C/AL code in the OnDelete trigger.
DELETEALL	Record.DELETEALL([RunTrigger]) Use this function to delete all records in a C/SIDE table that fall within a specified range. The system only deletes those records selected by the filters set for Record. The optional boolean parameter "RunTrigger" lets you run the C/AL code in the OnDelete trigger. When the RunTrigger is FALSE (the default) the DELETEALL function is much faster because it requires only one call to the server. If RunTrigger is TRUE, there will not be any gain in performance because C/SIDE then has to load each record to the client anyway, in order to execute the OnDelete trigger.
DELETELINK [5.0]	Record.DELETELINK(ID) Use this function to delete a link that has been added to a record in a table.
DELETELINKS [5.0]	Record.DELETELINKS Use this function to delete all of the links that have been added to a record.
FIELDACTIVE	Ok := Record.FIELDACTIVE(Field) Use this function to check whether a field is enabled or not.
FIELDCAPTION	Caption := Record.FIELDCAPTION(Field) Use this function to return the current caption of a field as a string. FIELDCAPTION returns the caption of a field. FIELDCAPTION first looks for a CaptionML property. If it does not find one it will use the Name property.
FIELDERROR	Record.FIELDERROR(Field, [Text]) Use this function to stop the execution of the code (cause a run-time error, in fact) and create an error message for a field.
FIELDNAME	Name := Record.FIELDNAME(Field) Use this function to return the name of a field as a string.
FIELDNO	Number := Record.FIELDNO(Field) Use this function to return the number assigned to a field in the table description.
FILTERGROUP	[CurrGroup] := Record.FILTERGROUP([NewGroup]) Use this function to select a filtergroup and to find the number of the current filtergroup. A filtergroup can contain a filter for a Record that has been set earlier with SETFILTER or SETRANGE. The total filter applied is the combination of all the filters set in all the filtergroups. C/SIDE uses 7 FILTERGROUPS internally: 0 Std, 1 Global, 2 Form, 3 Exec, 4 Link, 5 Temp, 6 Security.
FIND	Ok := Record.FIND([Which]) Use this function to find a record in a C/SIDE table based on the values stored in keys. "Which" tells the system how to perform the search. If SearchStr contains '=', '>' or '<', you must assign values to all fields of the current and primary keys before you call FIND.
FINDFIRST	Ok := Record.FINDFIRST Use this function to find the first record in a table based on the current key and filter. This function should be used instead of FIND('+') when you only need the first record. Do not use this function in combination with REPEAT .. UNTIL.
FINDLAST	Ok := Record.FINDLAST Use this function to find the last record in a table based on the current key and filter. This function should be used instead of FIND('+') when you only need the last record. Do not use this function in combination with REPEAT .. UNTIL.
FINDSET	Ok := Record.FINDSET([ForUpdate][, UpdateKey]) Use this function to find a set of records in a table based on the current key and filter. The records can only be retrieved in ascending order. "ForUpdate": Set this to FALSE if you don't intend to modify any records in the set. "ForUpdateKey": If you are going to modify any field value within the current key, set this parameter to TRUE.

	You should only use this function when you explicitly want to loop through a recordset. You should ONLY use this function in combination with REPEAT .. UNTIL.
GET	[Ok :=] Record.GET([Value] ,...) Use this function to find a record based on values stored in primary key fields. This function always uses the primary key for the table and ignores any filters. The system does not change the current key and filters after you call this function.
GETFILTER	String := Record.GETFILTER(Field) Use this function to return a list of the filters within the current filter group that are applied to a field.
GETFILTERS	String := Record.GETFILTERS Use this function to return a string which contains a list of the filters within the current filter group for all fields in a record. In addition, this function also returns the state of MARKEDONLY.
GETPOSITION	String := Record.GETPOSITION([UseNames]) Use this function to return a string that contains the primary key of the current record.
GETRANGEMAX	Value := Record.GETRANGEMAX(Field) Use this function to return the maximum value in a range for a field. The data type of value must match the type of Field.
GETRANGEMIN	Value := Record.GETRANGEMIN(Field) Use this function to return the minimum value in a range for a field. The data type of value must match the type of Field.
GETVIEW	String := Record.GETVIEW([UseNames]) Use this function to return a string that describes the current sort order, key and filters on a table.
HASFILTER	Ok := Record.HASFILTER Use this function to determine if the system has attached a filter to a record within the current filter group.
HASLINKS [5.0]	Ok := Record.HASLINKS Use this function to find out whether or not a record contains any links.
INIT	Record.INIT Use this function to initialize a record in a C/SIDE table. The system does not initialize primary key or timestamp fields.
ISEMPTY	Empty := Record.ISEMPTY Use this function to find out whether a C/SIDE table or a filtered set of records is empty. When you are using SQL Server, this function is faster than using the Record.COUNT function and then testing the result for zero.
INSERT	[Ok :=] Record.INSERT([RunTrigger]) Use this function to insert a record into a C/SIDE table. If the "RunTrigger" parameter is TRUE, the code in the OnInsert trigger is executed.
LOCKTABLE	Record.LOCKTABLE([Wait] [, VersionCheck]) Use this function to lock a C/SIDE table to protect it from write transactions that conflict with each other. The SQL Server Option for Microsoft Dynamics NAV only supports the default values for the parameters of the LOCKTABLE function – LOCKTABLE(TRUE,FALSE).
MARK	[IsMarked] := Record.MARK([SetMarked]) Use this function to mark a record. You can also use this function to find out if a record is marked.
MARKEDONLY	[IsMarkedOnly] := Record.MARKEDONLY([SetMarkedOnly]) Use this function to tell the system to activate a special filter. After you use this function, your view of the table only includes records marked by this function.
MODIFY	[Ok :=] Record.MODIFY([RunTrigger]) Use this function to modify a record in a C/SIDE table. If the "RunTrigger" parameter is TRUE, the code in the OnModify trigger is executed.
MODIFYALL	Record.MODIFYALL(Field, NewValue [, RunTrigger]) Use this function to modify a field in all records within a range you specify. If the "RunTrigger" parameter is TRUE, the code in the OnModify trigger is executed.
NEXT	Steps := Record.NEXT([Steps]) Use this function to step through a specified number of records and retrieve a record. Steps is used to define the direction of the search and how many records to step over. > 0: Search Steps records forwards in the table. < 0: Search Steps records backwards in the table. = 0 No effect. If you do not specify Steps, the system finds the next record.
READCONSISTENCY	Ok := Record.READCONSISTENCY Use these functions to determine whether the table supports read consistency. The Microsoft Dynamics NAV Database Server supports read consistency as an integral part of the database architecture. At present, SQL Server does not support this feature.
READPERMISSION	Ok := Record.READPERMISSION Use this function to find out if you can read from a table. This function can test for both full read permission and a partial read permission that has been granted with a security filter.
RECORDLEVELLOCKING	Ok := Record.RECORDLEVELLOCKING Use these functions to find out whether the table supports record level locking. When you are using SQL Server, you can use record level locking. When you are using the Microsoft Dynamics NAV Database Server, you cannot use record level locking.
RELATION	TableNumber := Record.RELATION(Field) Use this function to find out the table relationship of a given field.
RENAME	[Ok]:= Record.RENAME(Value1, [Value2],...) Use this function to change a primary key in a C/SIDE table.
RESET	Record.RESET Use this function to remove all filters, including any special filters set by MARKEDONLY, and change the current key to the primary key. The system also removes any marks on the record and clears any C/AL variables on the record.
SETCURRENTKEY	[Ok :=] Record.SETCURRENTKEY(Field1, [Field2],...) Use this function to select a key for a table. When searching for a key, C/SIDE selects the first occurrence of the specified field(s).
SETFILTER	Record.SETFILTER(Field, String, [Value],...) Use this function to assign a filter to a field you specify.
SETPERMISSIONFILTER	Record.SETPERMISSIONFILTER Use this function to apply the user's security filter to a Record variable. The security filter is combined with any other filters that are placed on the Record variable with SETFILTER or SETRANGE. This C/AL function only applies to the SQL Server Option for Microsoft Dynamics NAV.

FORM.RUN	FORM.RUN(Number [, Record] [, Field]) Use this function to create and launch a form object, which you specify.
FORM.RUNMODAL	[Action] := Form.RUNMODAL(Number [, Record] [, Field]) Use this function to create, run, and close a form object, which you specify. The system runs the form modally. The optional return code tells you what action the user took. The possible return values are: OK, Cancel, LookupOK, LookupCancel, Yes, No, Close, Helpform, RunObject, RunSystem.
GETRECORD	Form.GETRECORD(Record) Use this function to retrieve the current record shown on the form.
HEIGHT	[CurrHeight] := Form.HEIGHT([NewHeight]) Use this function to return the current setting of the Height property of a form or control, and to set this property to a new value. The unit of measure is 1/100 mm.
LOGHEIGHT	[CurrLogHeight] := Form.LOGHEIGHT([NewLogHeight]) Use this function to return the current setting of the LogHeight property of a form, and to set this property to a new value. Use this property to define the logical height of the form. The logical size of a form can be larger than its physical size, which is what the system actually displays when the form is opened. The unit of measure is 1/100 mm.
LOGWIDTH	[CurrLogWidth] := Form.LOGWIDTH([NewLogWidth]) Use this property to define the logical width of the form. The logical size of the form can be larger than the physical size of the form, which is what the system actually displays when the form is opened. The unit of measure is 1/100 mm.
LOOKUPMODE	[CurrLookupMode] := Form.LOOKUPMODE([NewLookupMode]) Use this function to return the current setting of the LookupMode property of a form, and to set this property to a new value. If "NewLookupMode" is set to "No", the system automatically disables the LookupOK and LookupCancel actions.
MAXIMIZEDONOPEN	[CurrMaximized] := Form.MAXIMIZEDONOPEN([NewMaximized]) Use this function to return the current setting of the MaximizedOnOpen property of a form, and to set this property to a new value. Use this property to tell the system whether or not it should maximize the form immediately after it opens the form.
MINIMIZEDONOPEN	[CurrMinimized] := Form.MINIMIZEDONOPEN([NewMinimized]) Use this function to return the current setting of the MinimizedOnOpen property of a form, and to set this property to a new value. Use this property to tell the system whether to minimize the form immediately after it is opened.
OBJECTID	String := Form.OBJECTID([UseNames]) This function returns a string in the "form xxx" format, where xxx is the name or number of the application object.
RUN	Form.RUN Use this function to create and launch a form you specify. You can use CLEAR to remove the form.
RUNMODAL	[Action] := Form.RUNMODAL Use this function to create, launch, and close the form you specify. The optional return code tells you what action the user took. The possible return values are: OK, Cancel, LookupOK, LookupCancel, Yes, No, Close, Helpform, RunObject, RunSystem.
SAVERECORD	CurrForm.SAVERECORD Use this function to save the current record shown on the form.
SETRECORD	Form.SETRECORD(Record) Use this function to select the current record shown on the form.
SETSELECTIONFILTER	CurrForm.SETSELECTIONFILTER(Record) Use this function to have the system note the records the user has selected on the form, mark those records in the table specified, and set the filter to "marked only". If either all or no records are selected, marks will not be used.
SETTABLEVIEW	SETTABLEVIEW(Record) Use this function to apply the Table View on the current record as the table view for the form, report or dataport.
UPDATE	CurrForm.UPDATE([SaveRecord]) Use this function to save the current record and then update the controls in the form. If you set the SaveRecord parameter to FALSE, this function will not save the record before the system updates the form.
UPDATECONTROLS	CurrForm.UPDATECONTROLS Use this function to reload the captions of all controls on the current form. This is necessary when the user changes the caption class of a control after the form has been loaded.
UPDATEEDITABLE	UPDATEEDITABLE(Editable) Use this function to dynamically change the setting of the Editable property of a field, form or control. This function can only be called from the OnBeforeInput of the control.
URL	String:=Form.URL([UseNames]) This function returns a string that contains the full URL to a form.
VISIBLE	[IsVisible] := Form.VISIBLE([SetVisible]) Use this function to return the current setting of the Visible property of a form or control, and to change the setting of the property.
WIDTH	[CurrWidth] := Form.WIDTH([NewWidth]) Use this function to return the current setting of the Width property of a form or control, and to set this property to a new value. The unit of measure is 1/100 mm.
XPOS	[CurrXPos] := Form.XPOS([NewXPos]) Use this function to return the current setting of the XPos property (horizontal position)of a form or control, and to set this property to a new value. The unit of measure is 1/100 mm.
YPOS	[CurrYPos] := Form.YPOS([NewYPos]) Use this function to return the current setting of the YPos property (vertical position) of a form or control, and to set this property to a new value. The unit of measure is 1/100 mm.

GUID

Use this data type to give a unique identifying number to any database object. The Globally Unique Identifier (GUID) data type is a 16 byte binary data type. This data type is used for the global identification of objects, programs, records and so on. The important property of a GUID is that each value is globally unique. The value is generated by an algorithm, developed by Microsoft, which assures this uniqueness. The standard textual representation is {12345678-1234-1234-1234-1234567890AB}.

FILE

Variables of this data type give you access to files. Files can be opened in text or binary mode.

CLOSE	File.CLOSE Use this function to close a file which has been opened by OPEN.
COPY	[Ok :=] File.COPY(FromName, ToName) Use this function to copy a file.
CREATE	[Ok :=] File.CREATE(Name) Use this function to create and open an ASCII or binary file. If the file exists, the system will truncate it and then open it. Always call the TEXTMODE function before you use CREATE or OPEN.
CREATEINSTREAM	File.CREATEINSTREAM(Stream) Use this function to create an InStream object for a file. This enables you to stream data into the file.
CREATEOUTSTREAM	File.CREATEOUTSTREAM(Stream) Use this function to create an OutStream object for a file. This enables you to stream data out of the file.
CREATETEMPFILE	File.CREATETEMPFILE Use this function to create a temporary file. This enables you to save data of any format to a temporary file. This file has a unique name and will be stored in the temporary files folder. The file will be deleted when you use the CLOSE function.
ERASE	[Ok] := File.ERASE(Name) Use this function to erase a file.
EXISTS	[Ok :=] File.EXISTS(Name) Use this function to determine if a file exists.
GETSTAMP	[Ok] := File.GETSTAMP(Name, Date [, Time]) Use this function to find out the time at which a file was last written to (return a time stamp).
LEN	Length := File.LEN Use this function to return the length of an ASCII or binary file. This function is often used with POS and SEEK.
NAME	Name := File.NAME Use this function to return the name of an ASCII or binary file.
OPEN	[Ok] := File.OPEN Use this function to open an existing ASCII or binary file. As compared to CREATE, this function does not create the file if it does not exist. Always call the TEXTMODE function before you use CREATE or OPEN.
POS	Position := File.POS Use this function to return the current position of the file pointer in an ASCII or binary file. This function is often used with LEN and SEEK.
QUERYREPLACE	[IsQueryreplace :=] File.QUERYREPLACE([SetQueryreplace]) This function is used to determine whether the system should query the user before overwriting a file if it already exists. The function can also be used to determine what the current setting of this option is for a file.
READ	[Read] := File.READ(Variable) Use this function to read from an ASCII or binary file. If TEXTMODE is set to TRUE, the system reads a line of text from the file, evaluates it and sets the variable equal to the result. If TEXTMODE is set to FALSE, the system determines the number of bytes to read based on the size of the variable.
RENAME	[Ok:=] File.RENAME(OldName, NewName) Use this function to rename an ASCII or binary file.
SEEK	File.SEEK(Position) Use this function to set a file pointer to a new position in an ASCII or binary file.
SETSTAMP	[Ok] := File.SETSTAMP(Name, Date [, Time]) Use this function to set a time stamp for a file.
TEXTMODE	[IsTextmode] := File.TEXTMODE([SetTextmode]) This function is used to set whether a file should be opened as an ASCII file or a binary file. The function can also be used to determine what the current setting of this option is for a file.
TRUNC	File.TRUNC Use this function to truncate an ASCII or binary file to the current position of the file pointer.
WRITE	File.WRITE(Value) Use this function to write to an ASCII or binary file. If TEXTMODE is set to TRUE and Value is an integer, the system formats the integer into text and writes the result, followed by a new line character. If Value is a record, the system separates each field with a tab character. If TEXTMODE is FALSE and Value is an integer, the system writes the integer as an integer which is four bytes long.
WRITEMODE	[IsWritemode :=] File.WRITEMODE([SetWritemode]) Use this function before you use OPEN to set or test whether you can write to a file in later calls.

FORM

Variables of this complex data type store forms. Forms contain simpler elements called controls. Controls are used to display information to the user or to receive information from the user.

ACTIVATE	[Ok :=] Form.ACTIVATE Use this function to make a form or control active.
ACTIVE	IsActive := Form.ACTIVE Use this function to find out if the current form is active or inactive.
CAPTION	[CurrCaption] := Form.CAPTION([NewCaption]) Use this function to return the current caption of an object as a string, and to set a new caption for the object.
CLOSE	Form.CLOSE Use this function to close the current form.
EDITABLE	[IsEditable] := Form.EDITABLE([SetEditable]) Use this function to return the current setting of the Editable property, and to change the setting of the property. This function can be used on forms and controls.
FORM	Subform := Form.FORM Use this function to access a form that is a subform of the current form - that is, the form that is defined as the SubFormID of a subform control. In order to execute a function that is a local function of a form that is used as a subform on the current form, use FORM like this: CurrForm.NameOfSubformControl.FORM.LocalFunctionToExecute;

SETPOSITION	Record.SETPOSITION(String) Use this function to set the fields in a primary key on a record to the values specified in the supplied string. The remaining fields are left untouched.
SETRANGE	Record.SETRANGE(Field [,FromValue] [,ToValue]) Use this function to set a simple filter, such as a single range or a single value, on a field. If you use SETRANGE without setting the From-Value/To-Value parameters, the function removes any filters that are already set.
SETRECFILTER	Record.SETRECFILTER Use this function to set the values in the current key of the current record as a record filter. You can use this function to set a filter on a table before running a report.
SETVIEW	Record.SETVIEW(String) Use this function to set the current sort order, key and filters on a table. If the SETVIEW function is executed with an empty string, all filters are removed and the primary key is used.
TABLECAPTION	Caption := Record.TABLECAPTION Use this function to return the current caption of a table as a string. TABLECAPTION first looks for an CaptionML property. If it does not find one it will use the Name property.
TABLERNAME	Name := Record.TABLERNAME Use this function to return the name of a C/SIDE table.
TESTFIELD	Record.TESTFIELD(Field, [Value]) Use this function to test to see if the contents of a field match a given value. If the contents differ from the given value, the system displays an error message. If you omit Value and the content of Fields is zero or blank (empty string), the system also displays an error message.
TRANSFERFIELDS	Record.TRANSFERFIELDS(FromRecord [, InitPrimaryKeyFields]) Use this function to copy all matching fields in one record to another record. Fields are copied based on the Field No. property of the fields. If you are copying a record that contains a BLOB field, you must calculate the BLOB field before it can be copied with the rest of the record.
VALIDATE	Record.VALIDATE(Field [, NewValue]) Use this function to call the triggers for the field you specify.
WRITEPERMISSION	Ok := Record.WRITEPERMISSION Use this function to find out if you can write to a table. This function can test for both full write permission and a partial write permission that has been granted with a security filter. A write permission consists of Insert, Delete and Modify permissions.

RECORDID

This data type contains the table number and the primary key of a table. You can store a RecordID in the database but you cannot set filters on a RecordID.

GETRECORD	RecordRef := RecordID.GETRECORD Use this function to return a recordref that refers to the record identified by recordID.
TABLENO	No := RecordID.TABLENO Use this function to return the table number of the table identified by recordid. This function returns an error if the record is blank.

RECORDREF

This complex data type identifies a row in a table. Each record consist of fields (which form the columns of the table). A record is typically used to hold information about a fixed number of properties. The RecordRef object can refer to any table in the database. Use the RecordRef.OPEN function to select the table you want to access. When you use the RecordRef.OPEN function a new object is created. This object contains references to the open table, filters and the record itself and all the fields it contains.

ADDLINK [5.0]	[ID :=]ADDLINK(URL[, Description]) Use this function to add a link to a record in a table. The URL can be a link to a Web site, a file stored on the local or on a remote computer, or a link to a Navision form.
ASCENDING	[IsAscending :=] RecordRef.ASCENDING([SetAscending]) Use this function to change or check the order in which the system will search through the table referred to by the recordref.
CAPTION	Caption := RecordRef.CAPTION Use this function to return the caption of the table that is currently selected. This function returns an error if no table is selected.
CLOSE	RecordRef.CLOSE Use this function to close the current table.
COUNT	Number := RecordRef.COUNT Use this function to count the number of records that are within the filters that are currently applied to the table referred to by the recordref.
COPYLINKS [5.0]	COPYLINKS(FromRecord) Use this function to copy all the links from a particular record.
COUNTAPPROX	Number := RecordRef.COUNTAPPROX Use this function to obtain an approximate count of the number of records in the table, for example, for updating progress bars or displaying informational messages. The count is approximate because it uses statistical information maintained by SQL Server, which is not kept precisely in synchronization with modifications to the table and is not under transaction control.
CURRENTKEY	CurrentKey := RecordRef.CURRENTKEY Use this function to return the current key of the table referred to by the recordref. The current key is returned as a string.
CURRENTKEYINDEX	[CurrKeyIndex :=] RecordRef.CURRENTKEYINDEX([NewKeyIndex]) Use this function to return or set the current key of the table referred to by the recordref. The current key is set or returned as a number.
DELETE	[Ok :=] RecordRef.DELETE([RunTrigger]) Use this function to delete a record in a C/SIDE table. The optional parameter lets you run the C/AL code in the OnDelete trigger.

DELETEALL	RecordRef.DELETEALL([RunTrigger]) Use this function to delete all records in a C/SIDE table that fall within a specified range. The system only deletes those records selected by the filters set for recordref. The optional parameter lets you run the C/AL code in the OnDelete trigger.
DELETEDLINK [5.0]	DELETEDLINK(ID) Use this function to delete a link that has been added to a record in a table.
DELETEDLINKS [5.0]	DELETEDLINKS Use this function to delete all of the links that have been added to a record.
DUPLICATE	RecordRef := RecordRef.DUPLICATE Use this function to duplicate the table that contains the recordref.
FIELD	Field := RecordRef.FIELD(FieldNo) Use this function to return the recordref of the field that has the number fieldno in the table that is currently selected. If no field has this number, the function returns an error.
FIELDCOUNT	Count := RecordRef.FIELDDCOUNT Use this function to return the number of fields in the table that is currently selected or to return the number of fields that have been defined in a key. These functions returns an error if no table or no key is selected
FIELDEXIST	Exist := RecordRef.FIELDEXIST(FieldNo) Use this function to find out if the field that has the number fieldno exists in the table that is referred to by the recordref. The function returns an error if no table is currently selected.
FIELDINDEX	Field := RecordRef.FIELDINDEX(Index) Use this function to return the fieldref of the field that has this index in the table referred to by the recordref.
FILTERGROUP	[CurrGroup :=] RecordRef.FILTERGROUP([NewGroup]) Use this function to change the filter group that is being applied to the table. A filtergroup can contain a filter for a RecordRef that has been set earlier with SETFILTER or SETRANGE. The total filter applied is the combination of all the filters set in all the filtergroups.
FIND	[Ok :=] RecordRef.FIND([Which]) Use this function to find a record in a table based on the values stored in the key fields.
FINDFIRST	Ok := Record.FINDFIRST Use this function to find the first record in a table based on the current key and filter. You should only use this function when you explicitly want to find the first record in a table/set. Do not use this function in combination with REPEAT .. UNTIL.
FINDLAST	Ok := Record.FINDLAST Use this function to find the last record in a table based on the current key and filter. You should only use this function when you explicitly want to find the last record in a table/set. Do not use this function in combination with REPEAT .. UNTIL.
FINDSET	Ok := Record.FINDSET([ForUpdate][, UpdateKey]) Use this function to find a set of records in a table based on the current key and filter. The records can only be retrieved in ascending order.
GET	[Ok:=]RecordRef.GET(RecordID) Use this function to find a record based on the ID of the record.
GETFILTERS	String := RecordRef.GETFILTERS Use this function to find out which filters have been applied to the table referred to by the recordref.
GETPOSITION	String := RecordRef.GETPOSITION([UseNames]) Use this functions to return a string that contains the primary key of the current record.
GETTABLE	RecordRef.GETTABLE(rec) Use this function to make a recordref variable use the same table instance as a record variable.
GETVIEW	String := RecordRef.GETVIEW([UseNames]) Use this function to return a string that describes the current sort order, key and filters on a table.
HASFILTER	Ok := RecordRef.HASFILTER Use this function to find out whether or not a filter has been applied to the table referred to by a recordref.
HASLINKS [5.0]	Ok := HASLINKS Use this function to find out whether or not a record contains any links.
INIT	RecordRef.INIT Use this function to initialize a record in a table. The system does not initialize primary key or timestamp fields.
INSERT	[Ok :=] RecordRef.INSERT([RunTrigger]) Use this function to insert a record into a table. The optional boolean parameter "RunTrigger" lets you run the C/AL code in the OnInsert trigger.
ISEMPTY	Empty := RecordRef.ISEMPTY Use this function to find out whether any records exist within a filtered set of records in a table.
KEYCOUNT	Count := RecordRef.KEYCOUNT Use this function to return the number of keys that exist in the table that is referred to by the recordref. This function returns an error if no table is selected.
KEYINDEX	Key := RecordRef.KEYINDEX(Index) Use this function to return the keyref of the key that has this index in the table that is currently selected.
LOCKTABLE	RecordRef.LOCKTABLE([Wait] [, VersionCheck]) Use this function to lock a table to protect it from write transactions that conflict with each other.
MODIFY	[Ok :=] RecordRef.MODIFY([RunTrigger]) Use this function to modify a record in a C/SIDE table.
NAME	Name := RecordRef.NAME Use this function to return the name of the table that is currently selected. This function returns an error if no table is selected.
NEXT	[Steps :=] RecordRef.NEXT([Steps]) Use this function to step through a specified number of records and retrieve a record.
NUMBER	No := RecordRef.NUMBER Use this function to return the table ID (number) of the table that contains the record referred to by the recordref.
OPEN	RecordRef.OPEN(No[, Temp][, CompanyName]) Use this function to make a RecordRef variable refer to a table which is identified by its number in a particular company. If you omit this parameter, the system uses the current company.
READCONSISTENCY	Ok := RecordRef.READCONSISTENCY Use this function to know whether or not read consistency is supported. The Microsoft Dynamics NAV Database Server supports read consistency as an integral part of the database architecture. At present, SQL Server does not support this feature.

UPDATE	Dialog.UPDATE([Number] [, Value]) Use this function to update the value of a '#'-or '@' field in the current window. Each '#' or '@' field has a specific number. The Number argument tells the system into which field it should insert Value.
YIELD	YIELD Use this function to pass control to the operating system, specifically DOS/Windows 3.x, so it can process events. Once the operating system finishes, you regain control.

ERROR HANDLING

You can set up Microsoft Dynamics NAV so that it keeps running even if a runtime error occurs. You can use the GETLASTERRORTEXT function to find out whether or not an error has occurred and to see the actual text in the last error message that was generated. You can then use the CLEARLASTERROR function to remove the last error message from memory..

CLEARLASTERROR [5.0]	CLEARLASTERROR Use this function to remove the last error message from memory.
GETLASTERRORTEXT [5.0]	String := GETLASTERRORTEXT Use this function to return the text that was contained in the last error message displayed by the system. The string cannot exceed the maximum string length specified in Microsoft Dynamics NAV. This is currently 1024.

FIELDREF

This complex data type identifies a field in a table and gives you access to this field. The fieldref object can refer to any field in any table in the database.

ACTIVE	Ok := FieldRef.ACTIVE Use this function to check whether the field that is currently selected is enabled or not.
CALCFIELD	[Ok :=] FieldRef.CALCFIELD Use this function to update a FlowField in a record.
CALCSUM	[Ok:=] FieldRef.CALCSUM Use this function to calculate the total of a SumIndexField in a table.
CAPTION	Caption := FieldRef.CAPTION Use this function to return the current caption of a field referred to by a fieldref as a string. CAPTION first looks for a CaptionML property. If it does not find one it will use the Name property.
CLASS	Class := FieldRef.CLASS Use this function to return the fieldclass of the field that is currently selected.
FIELDERROR	FieldRef.FIELDERROR([Text]) Use this function to stop the execution of the code (cause a run-time error, in fact) and create an error message for a field.
GETFILTER	String := FieldRef.GETFILTER Use this function to return the filter within the current filter group that are applied to a field.
GETRANGEMAX	Value := FieldRef.GETRANGEMAX Use this function to return the maximum value in a range for a field. The data type of "Value" must match the data type of the field referred to by the fieldref.
GETRANGEMIN	Value := FieldRef.GETRANGEMIN Use this function to return the minimum value in a range for a field. The data type of "Value" must match the data type of the field referred to by the fieldref.
LENGTH	Length := FieldRef.LENGTH Use this function to return the maximum size of the field (the size specified in the DataLength property of the field).
NAME	Name := FieldRef.NAME Use this function to return the name of a field as a string.
NUMBER	No := FieldRef.NUMBER Use this function to return the number of the field.
OPTIONCAPTION	OptionCaption := FieldRef.OPTIONCAPTION Use this function to return the option caption of the field that is currently selected.
OPTIONSTRING	OptionString := FieldRef.OPTIONSTRING Use this function to return the list of options that are available in the field that is currently selected.
RECORD	RecordRef := FieldRef.RECORD Use this function to return the recordref of the field that is currently selected.
RELATION	TableNumber := FieldRef.RELATION Use this function to find out the table relationship of a given field.
SETFILTER	FieldRef.SETFILTER(String [, Value],...) Use this function to assign a filter to a field you specify.
SETRANGE	FieldRef.SETRANGE([FromValue] [, ToValue]) Use this function to set a simple filter, such as a single range or a single value, on a field.
TESTFIELD	FieldRef.TESTFIELD([Value]) Use this function to see if the contents of a field match a given value. The data type of "Value" must match the type of the field.
TYPE	Type := FieldRef.TYPE Use this function to return the data type of the field that is currently selected.
VALIDATE	FieldRef.VALIDATE([NewValue]) Use this function to enter a new value into a field and have the new value validated by the properties and code that have been defined for that field. The data type of "NewValue" must be compatible with the data type of the field referred to by the fieldref.
VALUE	[CurrValue :=] FieldRef.VALUE([NewValue]) Use this function to set or get the value of the field that is currently selected.

DATES & TIMES

Use this simple data type DATE to denote dates ranging from January 1, 0 (the year zero) to December 31, 9999. The system defines an undefined date as 0D. Use the data type DATETIME to denote the date and time of day. The datetime is stored in the database as Coordinated Universal Time (UTC). Use the data type DURATION to represent the difference between two datetimes, in milliseconds. This value can be negative. It is a 64 bit integer. Use the simple data type TIME to denote a time. The system defines an undefined time as 0T. Any time between 00:00:00 to 23:59:59 is valid. The Microsoft Dynamics NAV undefined date is represented by the earliest valid date in SQL Server: 01-01-1753 00:00:00:000 for a DATETIME, and 01-01-1900 00:00:00:000 for a SMALLDATETIME.

CALCDATE	NewDate := CALCDATE(DateExpression [, Date]) Calculates a new date based on a date expression and a reference date. If a date formula is entered with < > delimiters surrounding it, the date formula will be stored in a generic, nonlanguage dependent format. This makes it possible to develop date formulas that are not dependent on the currently selected language.
CLOSINGDATE	ClosingDate := CLOSINGDATE(Date) Use this function to return the closing date for a Date. All dates have a corresponding closing date. To the system, a closing date is a period following the given date, but before the next normal date.
CREATEDATETIME	DateTime := CREATEDATETIME(Date, Time) Use this function to create a datetime from a date and a time.
CURRENTDATETIME	DateTime := CURRENTDATETIME Use this function to return the current datetime.
DATE2DMY	Number := DATE2DMY(Date, What) Returns the day, month, or year based on a date. "What" determines what the function should return: 1 = Day, 2 = Month, 3 = Year.
DATE2DWY	Number := DATE2DWY(Date, What) Returns the day of the week, week number, and year based on the input Date. "What" determines what the function should return: 1 = Day of the week, 2 = Week number, 3 = Year.
DAT12VARIANT	Variant := DAT12VARIANT(Date, Time) Use this system date function to create a variant that contains a VT_DATE.
DMY2DATE	Date := DMY2DATE(Day [, Month] [, Year]) Use this function to return a Date based on a day, month, and year.
DT2DATE	Date := DT2DATE(Datetime) Use this function to return the date part of a datetime.
DT2TIME	Time := DT2TIME(Datetime) Use this function to return the time part of a datetime.
DWY2DATE	Date := DWY2DATE(WeekDay [, Week] [, Year]) Use this function to return a Date based on a weekday, a week, and a year.
NORMALDATE	NormalDate := NORMALDATE(Date) Use this function to return the normal date (as opposed to the closing date) for the argument Date.
ROUNDDATETIME	NewDateTime := ROUNDDATETIME(Datetime [, Precision] [, Direction]) Use this function to round a datetime.
TIME	Time := TIME Use this function to retrieve the current time from the operating system.
TODAY	Date := TODAY Use this function to return the current date set in the operating system.
VARIANT2DATE	Date := VARIANT2DATE(Variant) Use this system date function to return a date from a VT_DATE variant.
VARIANT2TIME	Time := VARIANT2TIME(Variant) Use this system date function to return a time from a VT_DATE variant.
WORKDATE	[WorkDate]:= WORKDATE(NewDate) Use this function to return the current work date or to set a new work date.

DIALOG

Variables of this complex data type store dialog windows. These variables also give you access to a number of dialog functions, such as OPEN, CLOSE, and so on.

BEEP	BEEP(Frequency, Duration) Use this function to sound a tone through the computer's speaker. Duration is in milliseconds.
CLOSE	Dialog.CLOSE Use this function to close a dialog window which has been opened by OPEN.
CONFIRM	Ok := CONFIRM(String [, Default] [, Value1] ,...) Use this function to create a dialog box which prompts the user for a yes or no answer. Use a back slash (\) in "String" to indicate a new line.
ERROR	ERROR(String [, Value1, ...]) Use this function to display an error message and end the execution of C/AL code. Use a back slash (\) in "String" to start a new line. Use percent signs (%) or pound signs (#) to insert variable values into the string.
INPUT	NewControlID := Dialog.INPUT([ControlID] [,Variable]) Use this function to read what a user enters into a field in a window. The control ID of the next field in the window. If the user presses Esc to leave the window, the window will close and the calling C/AL code will terminate, and zero is returned.
MESSAGE	MESSAGE(String [, Value1, ...]) Use this function to display a text string in a message window. Use a back slash (\) in "String" to start a new line. Use percent signs (%) to insert variable values into the string.
OPEN	Dialog.OPEN(String [, Variable1], ...) Use this function to open a dialog window. This string contains the text you want the system to display in the window. Use a back slash (\) to start a new line. Use pound signs (#) to insert variable values into the string. If you use @ characters instead of #, the string can be used as an indicator.
STRMENU	OptionNumber := STRMENU(OptionString [, DefaultNumber]) Use this function to create a menu window that displays a series of options. "OptionString" is a comma-separated string. Each substring in OptionString denotes an option on the menu.

READPERMISSION	Ok := RecordRef.READPERMISSION Use this function to find out if you can read from a table. This function can test for both full read permission and a partial read permission that has been granted with a security filter.
RECORDID	RecordID := RecordRef.RECORDID Use this function to return the RecordID of the record that is currently selected in the table. If no table is selected, an error is generated.
RECORDLEVELLOCKING	Ok := RecordRef.RECORDLEVELLOCKING Use this function to find out whether the table supports record level locking. When you are using SQL Server, you can use record level locking. When you are using the Microsoft Dynamics NAV Database Server, you cannot use record level locking.
RESET	RecordRef.RESET Use this function to remove all filters, including any special filters set by MARKEDONLY and change the current key to the primary key. The system also removes any marks on the record and clears any C/AL variables on the record.
SETPERMISSIONFILTER	RecordRef.SETPERMISSIONFILTER Use this function to apply the user's security filter to a RecordRef variable. The security filter is combined with any other filters that are placed on the RecordRef variable with SETFILTER or SETRANGE.
SETPOSITION	RecordRef.SETPOSITION(String) Use this function to set the fields in a primary key on a record to the values specified in the supplied string. The remaining fields are left untouched.
SETRECFILTER	RecordRef.SETRECFILTER Use this function to set a filter on a record that is referred to by a recordref.
SETTABLE	RecordRef.SETTABLE(rec) Use this function to make a record variable use the same table instance as a recordref variable.
SETVIEW	RecordRef.SETVIEW(String) Use this function to set the current sort order, key and filters on a table.
WRITEPERMISSION	Ok := RecordRef.WRITEPERMISSION Use this function to find out if you can write to a table. This function can test for both full write permission and a partial write permission that has been granted with a security filter. A write permission consists of Insert, Delete and Modify permissions.

REPORT

Use this complex data type to store reports. Reports contain a number of simpler elements called controls. Controls are used to display information to the user or receive information from the user.

BREAK	BREAK Use this function to exit from a loop or a trigger in a data item trigger of a dataport, report or XMLport.
CREATETOTALS	CREATETOTALS(Var1 [, Var2] ,...) Use this function to maintain totals for a variable in the same way as totals are maintained for fields by using the TotalFields property.
NEWPAGE	NEWPAGE Use this function to force a page break when printing a report.
NEWPAGEPERRECORD	[IsNewPagePerRecord] := NEWPAGEPERRECORD([SetNewPagePerRecord]) Use this function to return the current setting of the NewPagePerRecord property, and to set this property to a new value.
OBJECTID	String:=Report.OBJECTID([UseNames]) Use this function to return the name of a report. If the parameter "UseNames" is set to TRUE (default value) or if it is empty, the returned string contains the name of the report. If the parameter is set to FALSE, the returned string (report xxx) contains the number of the report.
PAGENO	[CurrPageNo] := PAGENO([NewPageNo]) Use this function to return the current page number of a report, and to set a new page number.
PAPERSOURCE	CurrReport.PAPERSOURCE(PaperBinNo [, PhysicalPage]) Use this function to return the paper source used for the current page or a specified page, and to set a new paper source.
PREVIEW	IsPreview := PREVIEW Use this function to determine whether a report is being printed in preview mode or not.
PRINTONLYIFDETAIL	[IsPrintOnlyIfDetail] := PRINTONLYIFDETAIL([SetPrintOnlyIfDetail]) Use this function to return the current setting of the PrintOnlyIfDetail property, and to set this property to a new value. Use this property to determine whether the decision to output the sections of a data item will be based on whether an indented data item - or several nested data items - generate any output.
QUIT	QUIT Use this function to abort the processing of a dataport, report or XMLport. When the QUIT function is used, the dataport, report or XMLport is left without committing any changes that were made during the execution to the database. The OnPostReport, OnPostDataPort or OnPostXMLport trigger will not be called.
REPORT.RUN	REPORT.RUN(Number [, ReqWindow] [, SystemPrinter] [, Record]) Use this function to load and execute the report you specify. The parameter "SystemPrinter" tells the system whether it should use the default Windows printer or use the Printer Selection table to find the right printer for this report.
REPORT.RUNMODAL	REPORT.RUNMODAL(Number [, ReqWindow] [, SystemPrinter] [, Record]) Use this function to load and execute the report you specify. The parameter "SystemPrinter" tells the system whether it should use the default Windows printer or use the Printer Selection table to find the right printer for this report.
RUN	Report.RUN Use this function to load and execute the report you specify. The system automatically clears the variable after it executes this function.
RUNMODAL	Report.RUNMODAL Use this function to load and execute the report you specify. The system does not automatically clear the variable after it executes this function.
SAVEASHTML	[Ok :=] Report.SAVEASHTML(Number, FileName [,SystemPrinter] [, Rec]) [Ok :=] Report.SAVEASHTML(FileName)

SAVEASXML	Use this function to save a report as an HTML file. A browser that supports HTML version 3.0 or later is recommended for viewing the file. [Ok :=] Report.SAVEASXML(Number, FileName [,SystemPrinter] [, Rec]) [Ok :=] Report.SAVEASXML(FileName) Use this function to save a report as an XML file.
SETTABLEVIEW	SETTABLEVIEW(Record) Use this function to apply the Table View on the current record as the table view for the form, report or dataport.
SHOWOUTPUT	[IsShow] := SHOWOUTPUT ([SetShow]) Use this function to return the current setting of whether a section should be outputted or not, and to change this setting.
SKIP	SKIP Use this function to skip the current iteration of the current dataport, report or XMLport.
TOTALSCAUSEDBY	FieldNo := TOTALSCAUSEDBY Use this function to determine which field caused a group total to be calculated - meaning determining which field changed contents and thereby concluded a group. This function can only be used in group header and group footer sections.
URL	String:=Report.URL([UseNames]) This function returns a string with the full URL to a report.
USERREQUESTFORM	[IsUseRequestForm] := USERREQUESTFORM([SetUseRequestForm]) Use this function to return the current setting of the UseReqForm property, and to set this property to a new value. This function should be used before the request form is run - that is, in the OnInitReport trigger. Although it will not cause an error if it is used elsewhere, it will have no effect.

STRINGS

The following string data types exists: *BIGTEXT, CODE, TEXT*. The normal string functions cannot be used with a *BigText* variable.

BIGTEXT	
ADDTXT	BigText.ADDTEXT(Variable [,Position]) Use this function to add a text string to a BigText variable. The string can be inserted anywhere in the Variable or added at the end of the variable. To delete the content in a BigText variable use the CLEAR function
GETSUBTEXT	[RetLength] := BigText.GETSUBTEXT(Variable, Position [,Length]) Use this function to retrieve part of a BigText variable.
LENGTH	Length := BigText.LENGTH Use this function to retrieve the length of a BigText variable.
READ	[Ok :=] BigText.READ(InStream) Use this function to stream a BigText that is stored as a BLOB in a table to a BigText variable.
TEXTPOS	Position := BigText.TEXTPOS(String) Use this function to retrieve the position at which a specific string first occurs in a BigText.
WRITE	[Ok :=] BigText.WRITE(OutStream) Use this function to stream a BigText to a BLOB field in a table.
STRING	
CONVERTSTR	NewString := CONVERTSTR(String, FromCharacters, ToCharacters) Use this function to convert the characters in a string based on the characters in the strings FromCharacters and ToCharacters, which serve as conversion tables. A run-time error occurs if the lengths of the FromCharacters and ToCharacters strings are not equal.
COPYSTR	NewString := COPYSTR(String, Position [, Length]) Use this function to copy a substring of any length from a specific position in a string (text or code) to a new string. If you omit Length, the resulting string includes all characters from Position to the end of the string.
DELCHR	NewString := DELCHR(String [, Where] [, Which]) Use this function to delete one or more characters in a string.
DELSTR	NewString := DELSTR(String, Position [, Length]) Use this function to delete a substring inside a string (text or code).
FORMAT	String := FORMAT(Value [, Length] [, FormatStr/Number]) Use this function to format a value into a string.
INCSTR	NewString := INCSTR(String) Use this function to increase a positive number or decrease a negative number inside a string by 1.
INSSTR	NewString := INSSTR(String, SubString, Position) Use this function to insert a substring into a string.
LOWERCASE	NewString := LOWERCASE(String) Use this function to convert all letters in a string to lowercase.
MAXSTRLEN	MaxLength := MAXSTRLEN(String) Use this function to return the maximum defined length of a string variable.
PADSTR	NewString := PADSTR(String, Length [, FillCharacter]) Use this function to change the length of a string to a length you define. The system does this by either truncating the string or adding filler characters at the end of the string.
SELECTSTR	NewString := SELECTSTR(Number, CommaString) Use this function to retrieve a substring from a comma-separated string.
STRCHECKSUM	CheckNumber :=STRCHECKSUM(String [, WeightString] [, Modulus]) Use this function to calculate a checksum for a string containing a number.
STRLEN	Length := STRLEN(String) Use this function to return the length of a string you define.
STRPOS	Position := STRPOS(String, SubString) Use this function to search for a substring inside a string.
STRSUBSTNO	NewString := STRSUBSTNO(String [,Value1, ...]) Use this function to replace %1, %2, %3... and #1, #2, #3... fields in a string with the values you provide as optional parameters.
UPPERCASE	NewString := UPPERCASE(String) Use this function to convert the letters in a string to uppercase.

UPDATEINDENT	UPDATEINDENT(Indent) Use this function set the Indent property of a text box. The Indent property can only be set by using this function from the OnFormat trigger of the text box. The indentation in 1/100 mm.
VISIBLE	[IsVisible] := Form.VISIBLE([SetVisible]) Use this function to return the current setting of the Visible property of a form or control, and to change the setting of the property.
WIDTH	[CurrWidth] := Form.WIDTH([NewWidth]) Use this function to return the current setting of the Width property of a form or control, and to set this property to a new value.
XPOS	[CurrXPos] := Form.XPOS([NewXPos]) Use this function to return the current setting of the XPos property of a form or control, and to set this property to a new value. This property defines the horizontal position of the form or control. The system shows you the position, in increments of 1/100 of a millimeter.
YPOS	[CurrYPos] := Form.YPOS([NewYPos]) Use this function to return the current setting of the YPos property of a form or control, and to set this property to a new value. This property defines the vertical position of the form or control. The system shows you the position, in increments of 1/100 of a millimeter.

DATABASE

CHECKLICENSEFILE	CHECKLICENSEFILE(KeyNumber) Use this function to check a key in the license file of the system.
COMMIT	COMMIT Use this function to end the current write transaction. If you want the C/AL codeunit to perform multiple write transactions, you must use the COMMIT function to end one write transaction before you can start the next. The COMMIT function separates write transactions in a C/AL code module.
COMPANYNAME	Name := COMPANYNAME Use this function to return the current company name.
CURRENTTRANSACTIONTYPE	[TransactionType :=] CURRENTTRANSACTIONTYPE([TransactionType]) This function can be used both to return the current transaction type and set a new type to be assigned. The following basic transaction types are available: Browse, Snapshot, UpdateNoLocks, Update, Report. [SQL]
LOCKTIMEOUT	[LockTimeout :=] LOCKTIMEOUT([LockTimeout]) Use this function to find out whether or not the lock timeout setting is set to on. You can also use this function to override the default setting. This function has been specifically designed for use in long running processes that shouldn't be terminated because of a lock timeout, for example batch jobs that run overnight.
SELECTLATESTVERSION	SELECTLATESTVERSION This function forces the latest version of the database to be used.
SERIALNUMBER	String := SERIALNUMBER Use this function to return a string which contains the serial number of the license file for your Microsoft Dynamics NAV system.
USERID	ID := USERID Use this function to have the system return the ID of the current user.

DATAPORT

Dataports are objects that are used for importing data from and exporting data to external text files.

BREAK	BREAK Use this function to exit from a loop or a trigger in a data item trigger of a dataport, report or XMLport.
DATAPORT.RUN	DATAPORT.RUN(Number [, ReqWindow] [, Record]) Use this function to load and execute the dataport you specify.
DATAPORT.RUNMODAL	DATAPORT.RUNMODAL(Number [, ReqWindow] [, Record]) Use this function to load and execute the dataport you specify.
FILENAME	[CurrFileName] := FILENAME([NewFileName]) Use this function to return the current setting of the FileName property of a dataport, and to set this property to a new value. If FileName is left blank, a default request options form tab will be created, where this property can be set at run time.
IMPORT	[IsImport] := IMPORT([SetImport]) Use this function to return the current setting of the Import property, and to change the setting of the property. Import can only be set dynamically in the OnPreDataPort trigger. If Import is left blank, a default request options form tab will be created, where this property can be set at runtime.
QUIT	QUIT Use this function to abort the processing of a dataport, report or XMLport. When the QUIT function is used, the dataport, report or XMLport is left without committing any changes that were made during the execution to the database. The OnPostReport, OnPostDataPort or OnPostXMLport trigger will not be called.
RUN	Dataport.RUN Use this function to load and execute the dataport you specify. The system automatically clears the variable after it executes this function.
RUNMODAL	Dataport.RUNMODAL Use this function to load and execute the dataport you specify. The system does not automatically clear the variable after it executes this function. You must handle clearing the variable after using it.
SETTABLEVIEW	SETTABLEVIEW(Record) Use this function to apply the Table View on the current record as the table view for the form, report or dataport. If you use this function and the SaveTableView property of the form is set to "Yes", the system will not save the current table view in the setup file.
SKIP	SKIP Use this function to skip the current iteration of the current dataport, report or XMLport.

AUTOMATION

The Automation data type is used to reference an automation server. In order to use an automation server in C/SIDE, define a variable of type Automation and give it a name. C/SIDE can receive events from an Automation server.

CREATE	[Ok :=] CREATE(Automation [,NewServer]) Use this function to create an Automation object.
ISCLEAR	Ok := ISCLEAR(Automation) Use this variable function to check whether an automation object has been created or not.
VARIABLEACTIVE	IsActive := VARIABLEACTIVE(Variable) Use this function to determine if a variable, such as field or a control, is active or inactive.

BLOB

BLOBs (Binary Large Object) have a variable length. The maximum size of a BLOB is normally determined by your system's disk storage capacity. However, the maximum size in C/SIDE is 2GB. Note that C/SIDE cannot display text stored in BLOBs.

CREATEINSTREAM	Blob.CreateInStream(Stream) Use this function to create an InStream object for a BLOB. This enables you to stream data into the BLOB.
CREATEOUTSTREAM	Blob.CreateOutStream(Stream) Use this function to create an OutStream object for a BLOB. This enables you to stream data out of the BLOB.
EXPORT	[ExportName :=] Blob.EXPORT([Name [, CommonDialog]]) Use this function to export a BLOB.
HASVALUE	HasValue := Blob.HASVALUE Use this function to determine if a BLOB has a value.
IMPORT	[ImportName :=] Blob.IMPORT([Name [, CommonDialog]]) Use this function to import a BLOB.

CODEUNIT

Use this complex data type to store units of C/AL code. Codeunits contain a number of user-defined functions.

Codeunit.RUN	[Ok :=] Codeunit.RUN(Number [, Record]) Use this function to load and execute the unit of C/AL code you specify. If you do not include the optional return value, and an error occurs while the system is executing the codeunit, it terminates the execution of the C/AL code that called this codeunit. If you include the return value and there's an error, the system continues to execute the calling C/AL code. This means you must handle any errors. The possible values are shown below.
RUN	[Ok :=] Codeunit.RUN(VAR Record) Use this function to load and execute the unit of C/AL code you specify. To use this function, you can specify a C/SIDE table associated with the codeunit when you defined the codeunit properties. This lets you pass a variable with the function. The transaction that the codeunit contains is always committed due to the boolean return value.

CONTROLS

ACTIVATE	[Ok :=] Form.ACTIVATE Use this function to make a form or control active.
DECIMALPLACESMAX	[CurrMaxDecimals] := DECIMALPLACESMAX([NewMaxDecimals]) Use this function to return the current setting of the maximum number of decimal places for a control (field or text box), and to set a new value.
DECIMALPLACESMIN	[CurrMinDecimals] := DECIMALPLACESMIN([NewMinDecimals]) Use this function to return the current setting of the minimum number of decimal places for a control (field or text box), and to set a new value.
EDITABLE	[IsEditable] := Form.EDITABLE([SetEditable]) Use this function to return the current setting of the Editable property, and to change the setting of the property.
ENABLED	[IsEnabled] := ENABLED([SetEnabled]) Use this function to return the current setting of the Enabled property of a control, and to change the setting of the property.
HEIGHT	[CurrHeight] := Form.HEIGHT([NewHeight]) Use this function to return the current setting of the Height property of a form or control, and to set this property to a new value.
INLINEEDITING	[IsInLineEditing] := INLINEEDITING([SetInLineEditing]) Use this function to return the current setting of the InLineEditing property of a table box or a matrix box, and to change the setting of the property. The effect of setting this property to Yes is that by default, no editing will be allowed when the form is opened. The user must click on an active editable control, press F2 when an editable control is in focus, or choose to insert a new record to begin editing.
UPDATEEDITABLE	UPDATEEDITABLE(Editable) Use this function to dynamically change the setting of the Editable property of a field, form or control. This function can only be called from the OnBeforeInPut of the control.
UPDATESELECTED	UPDATESELECTED(Selected) Use this function to mark a control as selected (which will normally be displayed in reverse video, but this depends upon the Windows color scheme that the end user has chosen). This function can only be used in the OnFormat trigger.
UPDATEFONTBOLD	UPDATEFONTBOLD(FontBold) Use this function to dynamically change the setting of the FontBold property of a control. This function can only be called from the OnFormat trigger of the control.
UPDATEFORECOLOR	UPDATEFORECOLOR(ForeColor) Use this function to dynamically change the setting of the ForeColor property of a control. This function can only be called from the OnFormat trigger of the control.

SYSTEM

ARRAY	
ARRAYLEN	Length := ARRAYLEN(Array [, Dimension]) Use this function to return the total number of elements in an array or the number of elements in a specific dimension.
COMPRESSARRAY	[Count :=] COMPRESSARRAY(StringArray) Use this function to move all non-empty strings (text) in an array to the beginning of the array. The resulting StringArray has the same number of elements as the input array, but empty entries and entries that contain only blanks appear at the end of the array.
COPYARRAY	COPYARRAY(NewArray, Array, Position [, Length]) Use this function to copy one or more elements in an array to a new array. You can only copy from one-dimensional arrays. Repeat the COPYARRAY function to copy two- and three-dimensional arrays.

CODECOVERAGE
CODECOVERAGELOG

[IsActive]:= CODECOVERAGELOG([NewsIsActive])
Use this function to start and stop the logging of code. You can also use it to retrieve the current logging status. You must only start the Code Coverage tool from the command prompt when you want to get a total overview of the code used when running Microsoft Dynamics NAV or when you are testing the application. To start Microsoft Dynamics NAV with the Code Coverage tool on, enter the following command: "fin.exe COVERAGELOG". To start Microsoft Dynamics NAV with the Code Coverage tool on and to log the results in file xx.xx, enter the following command: "fin.exe COVERAGELOG, COVERAGEFILENAME=xx.xx".

LANGUAGE
GLOBALLANGUAGE

[LanguageID]:= GLOBALLANGUAGE([NewLanguageID])
Use this function to set and retrieve the current C/SIDE global language setting The LanguageID is a standard Windows language ID. The Windows Language virtual table contains a list of these IDs and the corresponding names and short names..

LANGUAGE	[CurrLanguage]:= LANGUAGE([NewLanguage]) Use this function to set and retrieve the current language setting for an object (form, report or dataport).
WINDOWSLANGUAGE	LanguageID:= WINDOWSLANGUAGE Use this function to retrieve the current Windows language setting.

OPERATING SYSTEM
APPLICATIONPATH [5.0]

APPLICATIONPATH
Use this function to return the path to the directory where the executable file for Microsoft Dynamics NAV is installed. This string ends with a backslash (\) and does not contains the name of the executable file. The string cannot contain more than 255 characters.

COMMANDLINE	String := COMMANDLINE Use this function to return a list of the parameters used to start Microsoft Dynamics NAV.
CONTEXTURL	String:=CONTEXTURL Use this function to return a context string that defines the current position of the running objects. Here are two examples of a context string: navision://client/run?database=filename&company=companyname navision://client/run?server=servername&company=companyname&servertype=MSSQL
ENVIRON	String := ENVIRON(Name) Use this function to return a string associated with an environment variable. If the environment variable does not exist, the string that is returned may contain garbage.
GUIALLOWED	[Ok:=] GUIALLOWED() Use this operating system function to check whether the C/AL code is allowed to show any information on the screen. When you run Microsoft Dynamics NAV Application Server, GUIALLOWED always returns FALSE and any call to CONFIRM or dialog.OPEN, or any attempt to use a form or dataport will generate an error.
HYPERLINK	HYPERLINK(URL) This function starts up Microsoft Internet Explorer, passing a URL as an argument to that program. The HYPERLINK function works with a number of protocols and file types that are approved in the version of the program that you are using. This protocols and file types are listed in the .stx file.
OSVERSION	String := OSVERSION Use this function to return a string which contains the name and version of the operating system or operating environment. This string tells you the type and version of the operating system or operating environment. Here are some typical examples of what the system returns: Windows 98 -> Windows_95_4.10; Windows NT -> Windows_NT_4.0; Windows 2000 -> Windows_NT_5.0; Windows XP -> Windows_NT_5.1; Windows 2003 -> Windows_NT_5.2.
SHELL	[ReturnCode]:= SHELL(Name [, Param, ...]) Use this function to execute external programs and operating system commands from C/AL programs. You can run this function modally or non-modally, depending on whether or not you include the return value from the external program in your code. The SHELL function has been designed so that each user can create a list of trusted executables. This list is maintained in the user's zup file. The way this function works depends on whether the executable is given as a text constant or as a variable.
SLEEP	SLEEP(Duration) Use this function to return control to the operating system for a specifiable amount of time (milliseconds).
TEMPORARYPATH [5.0]	TEMPORARYPATH Use this function to return the path to the directory where the temporary file for Microsoft Dynamics NAV is installed. This string ends with a backslash (\) and does not contains the name of the temp file. The string cannot contain more than 255 characters.

VARIABLE
CLEAR

CLEAR(Variable)
Use this function to clear the value of a single variable. CLEAR also clears all filters that were set if the variable is a record and resets the key to the primary key. Use the CLEARALL function to clear all internal variables, keys, and filters in the object and in any associated objects such as reports, forms, codeunits, and so on that contain C/AL code. Note, however, that CLEARALL does not affect or change values for variables in single instance codeunits.

CLEARALL	<p>CLEARALL</p> <p>Use this function to clear all internal variables (except REC variables), keys, and filters in the object and in any associated objects, such as reports, forms, codeunits, and so on that contain C/AL code. CLEARALL works by calling CLEAR repeatedly on each variable. However, this is not the case with codeunits, where the CLEARALL function works by calling CLEARALL inside the codeunit. It deletes the contents of the codeunit, whereas CLEAR only deletes the reference to the codeunit.</p>
COPYSTREAM	<p>[Ok :=] COPYSTREAM(OutStream, InStream)</p> <p>Use this variable function to copy the information contained in an InStream to an OutStream.</p>
EVALUATE	<p>[Ok :=] EVALUATE(Variable, String [, Number])</p> <p>Use this function to evaluate a string representation of a value into its normal representation. The system assigns the result to a variable.</p>

VARIANT

The C/AL variant data type can contain any variants from OCX and Automation objects (VT_VARIANT). The variant data type can contain the following C/AL data types: record, file, action, codeunit, Automation, boolean, option, integer, decimal, char, text, code, date, time, binary, DateFormula, TransactionType, InStream and OutStream. To return C/AL variants in function calls, you must pass them in a parameter ByVar (called ByRef in COM).

DAT12VARIANT	<p>Variant := DAT12VARIANT(Date, Time)</p> <p>Use this system date function to create a variant that contains a VT_DATE.</p>
VARIANT2DATE	<p>Date := VARIANT2DATE(Variant)</p> <p>Use this system date function to return a date from a VT_DATE variant.</p>
VARIANT2TIME	<p>Time := VARIANT2TIME(Variant)</p> <p>Use this system date function to return a time from a VT_DATE variant.</p>

Following functions are used to find out whether a C/AL variant contains some type of variable:

ISACTION	Ok := Variant.ISACTION
ISAUTOMATION	Ok := Variant.ISAUTOMATION
ISBINARY	Ok := Variant. ISBINARY
ISBOOLEAN	Ok := Variant. ISBOOLEAN
ISCHAR	Ok := Variant. ISCHAR
ISCODE	Ok := Variant. ISCODE
ISCODEUNIT	Ok := Variant.ISCODEUNIT
ISDATE	Ok := Variant. ISDATE
ISDATEFORMULA	Ok := Variant.ISDATEFORMULA
ISDECIMAL	Ok := Variant. ISDECIMAL
ISFILE	Ok := Variant.ISFILE
ISINSTREAM	Ok := Variant.ISINSTREAM
ISINTEGER	Ok := Variant. ISINTEGER
ISOPTION	Ok := Variant. ISOPTION
ISOUTSTREAM	Ok := Variant.ISOUTSTREAM
ISRECORD	Ok := Variant.ISRECORD
ISTEXT	Ok := Variant. ISTEXT
ISTIME	Ok := Variant. ISTIME
ISTRANSACTIONTYPE	Ok := Variant.ISTRANSACTIONTYPE

VIRTUAL TABLES					
2000000001	Object	2000000029	System Object	2000000052	Windows Group Member
2000000002	User	2000000037	Performance	2000000053	Windows Access Control
2000000003	Member Of	2000000038	AllObj	2000000054	Windows Login
2000000004	User Role	2000000039	Printer	2000000055	SID - Account ID
2000000005	Permission	2000000040	License Information	2000000056	User SID
2000000006	Company	2000000041	Field	2000000058	AllObjWithCaption
2000000007	Date	2000000042	OLE Control	2000000059	Breakpoint
2000000009	Session	2000000043	License Permission	2000000061	User Menu Level
2000000010	Database File	2000000044	Permission Range	2000000063	Key
2000000020	Drive	2000000045	Windows Language	2000000065	Send-To Program [5.0]
2000000022	File	2000000046	Automation Server	2000000066	Style Sheet [5.0]
2000000024	Monitor	2000000049	Code Coverage	2000000067	User Default Style Sheet [5.0]
2000000026	Integer	2000000050	Windows Object	2000000068	Record Link [5.0]
2000000028	Table Information	2000000051	Service Connection Point	2000000203	Database Key Groups

XMLPORT

The XMLport object is conceptually related to a dataport; you also use XMLports to import and export data, but in XML format. XMLports make the process of exchanging data in XML between systems more simple and streamlined. You only need a basic knowledge of XML and you do not have to create XML documents using external products.

BREAK	<p>BREAK</p> <p>Use this function to exit from a loop or a trigger in a data item trigger of a dataport, report or XMLport.</p>
QUIT	<p>QUIT</p> <p>Use this function to abort the processing of a dataport, report or XMLport.</p>
SKIP	<p>SKIP</p> <p>Use this function to skip the current iteration of the current dataport, report or XMLport.</p>
XMLport.EXPORT	<p>[{Ok} :=] EXPORT(Number, OutStream[, Record])</p> <p>Use this function to create an XML data stream (XML document) and send it to a chosen destination.</p>
XMLport.IMPORT	<p>[{Ok} :=] IMPORT(Number, InStream [, ResponseOutStream])</p> <p>Use this function to read and parse an incoming XML data stream (XML document).</p>



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