# XPCE-5.0 Release Notes

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This document provides an overview of new functionality of XPCE-5. The highlights are single-file executables using embedded (image) resources, passing native Prolog data through arguments of Prolog-defined methods and the introduction of graphical tables.

# CONTENTS

```
5           send(T, level_gap, 20),
6           send(T, node_handler,
7                click_gesture(left, '', single,
8
```

For example:

```
?- send(new(P, picture), open),
   send(P, display(box(100,100), point(10,10))).
```

Advantages of this representation are:

No limits to the number of argu7ents.

Generally easier specification of utility-predicates that wrap around the XPCE primitives as messages are represented using single Prolog term.

Possibility to define (efficiently) other syntaxes for XPCE.[1]

# 3: CLASS-VARIABLES

The XPCE-4 notion of resources, expressing user-defaults, has been replaced by the notion of class-

```
:- (   get(@pce, version, number, Version),
       Version >= 50000
   ->  use_module(library('compatibility/resource'))
   ;   true
   ).
```

Please note that when using this library, resources as defined in chapter 4 cannot appear inside a class-definition.

## 3.2: Consequences for the end-user

XPCE no longer uses the X11 resource-syntax. The syntax for a class-variable default value is defined as:

*hclassi.hclass-variablei*: *hvaluei*

Thus, the leading `Pce.` has been dropped and class-names are written in exact-case rather then capitalised. The value-syntax has not been changed.

The system defaults-file is located in `\$PCEHOME/Defaults`, where $PCEHOME refers to the XPCE home-directory (see '**@pce home**'). The user's defaults file is located in `~/.(def)10(aulot)-24s-fi.s:`

# 4: PROGRAM RESOURCES

```
?- send(image('myicon.ico'), save, 'myicon,xpm', xpm).
```

This transformation is complete as the XPM image format covers all aspects of the Microsoft image formats.

# 5: ERRORS AND PROLOG EXCEPTIONS

XPCE-5.0 provides a mapping between XPCE errors and Prolog exceptions. For this reason a new ‘**error**

# 7: LAYOUT MANAGERS

A *Layout Manager* is an object that is associated with a graphical **device** and which deals with managing the layout of the graphicals displayed on the device. Layout-managers can 0ither manipulate the graphicals **layout_interface** object to each the graphicals managed. The

```
        send(Table, sort_rows, ?(DL, compare_rows, @arg1, @arg2), 2).

compare_rows(DL, R1:table_row, R2:table_row, Result) :<-
        "Compare two rows on sort_column",
        get(DL, sort_column, ColName),
        get(R1, cell, ColName, C1),
        get(R2, cell, ColName, C2),
        get(C1, image, Gr1),
        get(C2, image, Gr2),
        get(Gr1, compare, Gr2, Result).
```

```
        send(Table, append, dir_value_text(Dir?name)),
        send(Table, next_row).

append_file(DL, File:file) :->
        "Append a directory-row"::
        get(DL, layout_manager, Table),
        get(File, base_name, Name),
        file_image(Name, Image),
        get(Table, row, Table?current?y, @on, Row),
xt(Dir?name)),  send(Table, append,Imagemage),
        send(Table,
                                                                    _supCrmageLname,
```

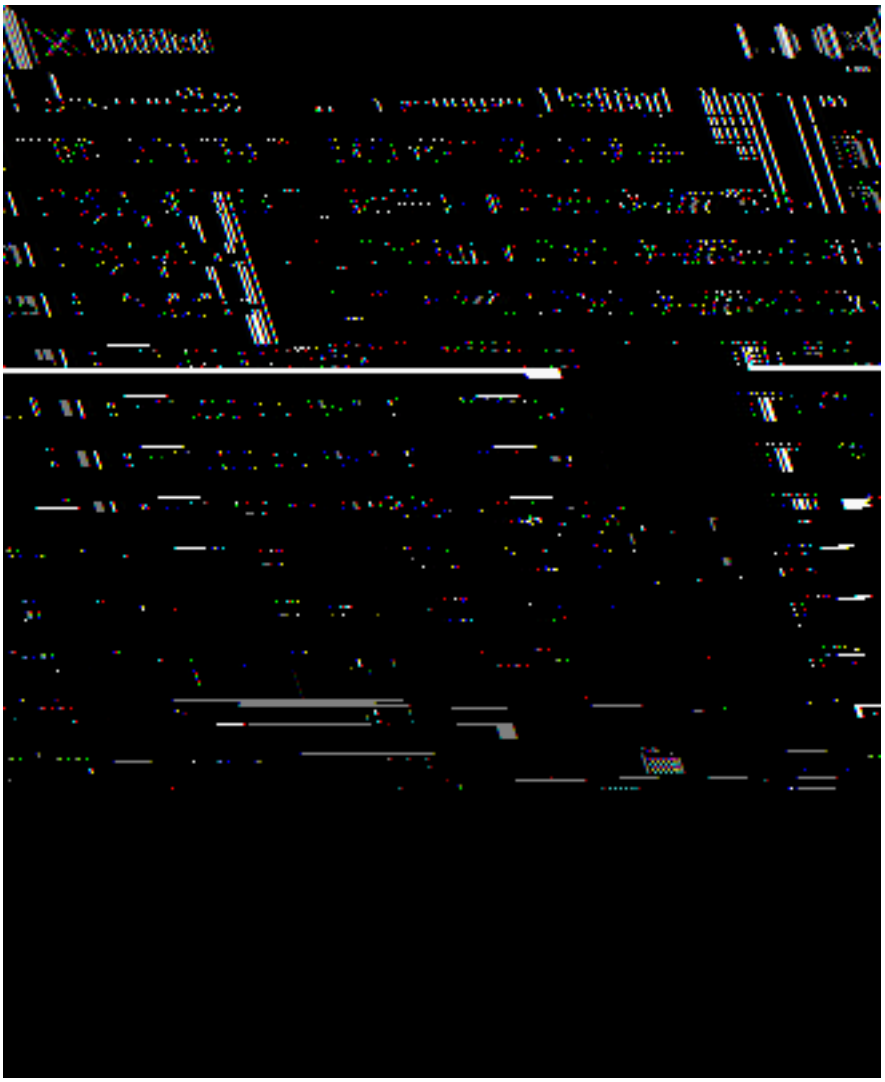

Figure 7.2: Resulting window for ?- show_directory('.').

Normally, **send_**

**send(**

# 9: STATUS, DISCUSSION AND PLANS

## 9.1: Prolog interface

XPCE-5.0.0 is primarily an evaluation release for the new XPCE/Prolog interface. Except for the issues noted in these release notes (especially chapter A

# A: MIGRATING OLD SOURCE CODE

send7.156d.82 1 0 0 1 11.955 0 cm 1 0 0 rg 1 0 0 RG BT /F38 9.963 Tf 0 0 Td[(4)]TJ ET 1