

# XPCE-5.0 Release Notes

*Jan Wielemaker*

SWI

University of Amsterdam

Roetersstraat 15

1018 WB Amsterdam

E-mail: `jan@swi.psy.uva.nl`

*January 1999*

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.



---

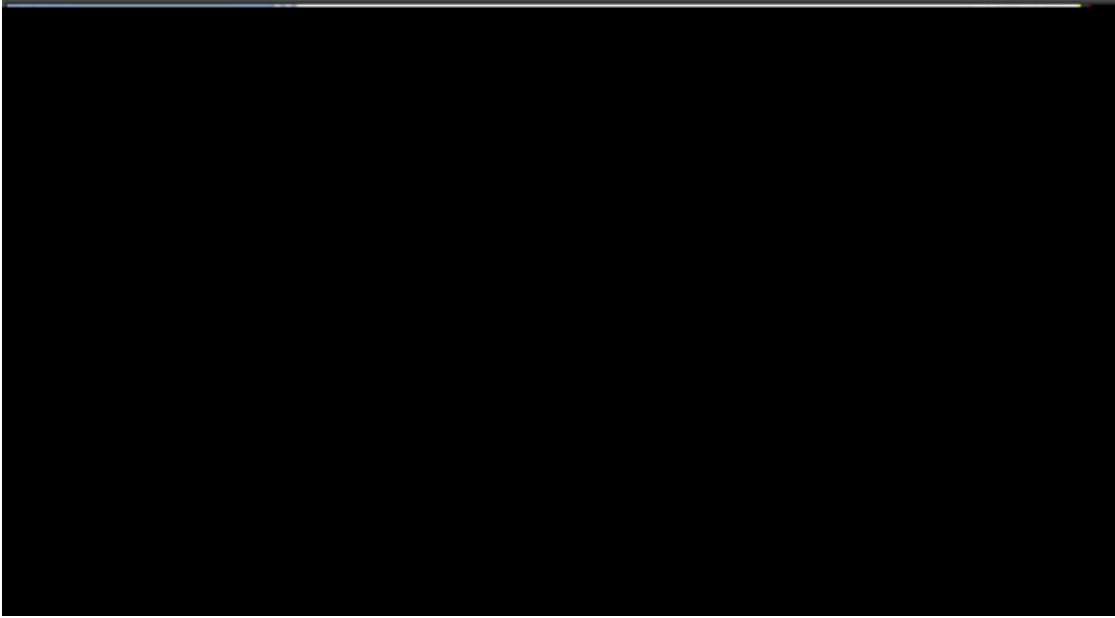
# CONTENTS

---

---



```
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 arguments.

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.<sup>1</sup>





---

## **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The XPCE-4 notion of resources, expressing user-defaults, has been replaced by the notion of class-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 than 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 either manipulate the graphicals **interface** object to each the graphicals managed. The



```

56         send(Table, sort_rows,?(DL, compare_rows, @arg1, @arg2), 2).
57 compare_rows(DL, R1:table_row, R2:table_row, Result) :<-
58     "Compare two rows on sort_column sort_column".
59     get(DL, sort_column, ColName),
60     get(R1, cell, ColName, C1),
61     get(R2, cell, ColName, C2),
62     get(C1, image, Gr1),
63     get(C2, image, Gr2),
64     get(Gr1, compare, Gr2, Result).
65 57get(DL,Ep-60:up-60olName, :<-58
57
58
59

```

[illegible]

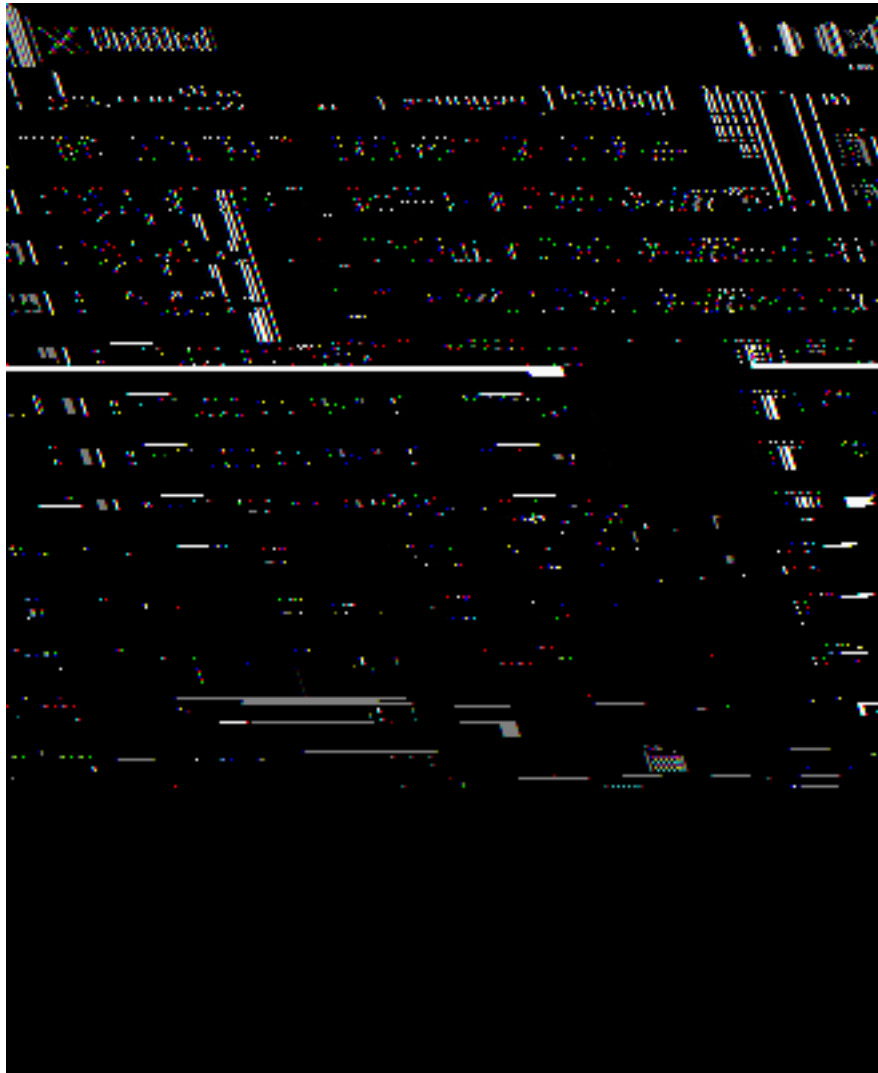


Figure 7.2: Resulting window for `?- show_directory('.')`.



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**

---



print\_message/2, 11  
prolog\_term class, 2, 4, 19, 22

real class, 22  
recorded/3, 2  
resource class, 9  
resource/3, 9

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