Powerpage is a lightweight web browser with DB capability and windows accessibility, for rapid application development by html/css/js.

Powerpage will connect to database, and load startup page by the setting of powerpage.ini, and open OLE web-browser with new protocol pb:// or ps:// supported below features

- (Run) Call External Program
- (File) Access file system
- (DB) Access Database
- (PB) Call Powerbuilder Windows/Functions
- (Misc) Variables, session information

Global Features (Callback, Prompt, @JsVar, Secured protocol)

"Callback, Prompt/Confirm, @JsVar, Secured protocol" are supported in all commands.

Description	Syntax	url protocol	javascript
Prompt for confirmation, then run command	pb://?Prompt Msg?/AnyCommand	pb://?Open notepad?/run/notepad.exe	javascript:pb.confirm('Open notepad').run('notepad.exe')
Callback js function after run command	pb://callback/jsFunction/AnyCommand	pb://callback/mycallback/run/calc.exe	javascript:pb.callback('mycallback').run('calc.exe')
use @jsVar as command parameter for long string	pb://AnyCommand/@jsVarName	pb://sql/query/@sql1	javascript:pb.db.query(sql1)
Use Secured Protocol to run command	ps://AnyCommand	ps://run/resmon.exe	javascript:pb.secure().run('resmon.exe')

Run / RunAt / Shell

Run will call powerbuilder.run(), and RunAt will run program at its existing folder.
Shell command will be diverted to shell32.dll -> ShellExecuteW()

Description	Syntax	url protocol	javascript
Run a program, e.g. mspaint.exe, resmon.exe	pb://run/command	pb://run/mspaint.exe	javascript:pb.run('resmon.exe')
Run command with parameter e.g. edit powerpage.html	pb://run/Command+Parameters	pb://run/notepad.exe powerpage.html	javascript:pb.run('notepad.exe powerpage.html')
Run program in its directory	pb://runat/Command, pb://run@/Command	pb://runat/c:\app\notepad2.exe, pb://run@/c:\app\notepad2.exe	javascript:pb.runat('c:\\app\\notepad2.exe')
Shell: Open File (same as start.exe [file])	pb://shell/open/file	pb://shell/open/__temp__file.pdf	javascript:pb.shell.open('__temp__file.pdf.pdf')
Shell: Open folder (e.g. c:\temp)	pb://shell/open/folder	pb://shell/open/c:\temp	javascript:pb.shell.open('c:\\temp')
Shell: Run program (similar to runat())	pb://shell/run/filename	pb://shell/run/c:\app\notepad2.exe	javascript:pb.shell.run('c:\\app\\notepad2.exe')
Shell: Print File	pb://shell/print/filename	pb://?Print PDF?/shell/print/interface.pdf	javascript:pb.shell.print('__temp_file.pdf')

File Accessibility

calling powerbuilder.filecopy(), filemove(), fileread(), filewrite to provide file support.

Description	Syntax	url protocol	javascript
Copy powerpage.ppg to newfile.html	pb://file/copy/source/target	pb://file/copy/powerpage.html/newfile.html	javascript:pb.file.copy('powerpage.html','newfile.html')
Move/Rename newfile.html to another.html	pb://file/move/source/target	pb://file/move/newfile.html/another.html	javascript:pb.file.move('newfile.html','another.html')
Read another.html	pb://file/read/file	pb://file/read/another.html	javascript:pb.file.read('another.html')
Write to another.html	pb://file/write/file/text	pb://file/write/another.html/@sql1	javascript:pb.file.write('another.html', sql1)
Append to another.html	pb://file/append/file/text	pb://file/append/another.html/@sql2	javascript:pb.file.append('another.html', sql2)
Delete another.html	pb://file/delete/file	pb://?sure to delete?/file/delete/another.html	javascript:pb.confirm('sure to delete?').file.delete('another.html')
OpenFile dialog	pb://file/opendialog/{desc},{*.ext}	pb://file/opendialog/HTML (*.html),*.html	javascript:pb.file.opendialog('HTML (*.html),*.html')
SaveFile dialog	pb://file/savedialog/{desc},{*.ext}	pb://file/savedialog/HTML (*.html),*.html	javascript:pb.file.savedialog('HTML (*.html),*.html')

Database Accessibility

Query from database, execute sql or stored procedure.

Description	Syntax	url protocol	javascript
run ah-hoc SQL, return json	pb://json/sqlString	pb://json/select CategoryID, CategoryName from Categories	javascript:pb.db.json('select date(), now() ')
query db by the sql stored in @sql1, return string in json format	pb://json/@Variable	pb://json/@sql1	javascript:pb.db.json('@sql1'), javascript:pb.db.json(sql1)
alt query command: pb://sql/query = pb://json	pb://sql/query/sql	pb://sql/query/@sql1	javascript:pb.query(sql1) or javascript:pb.db.select(sql1)
run SQL and return string in html table format	pb://table/sql	pb://table/@sql2 or pb://sql/html/@sql2	javascript:pb.db.table(sql1) or javascript:pb.db.html(sql1)
Execute update statement	pb://sql/execute/sql	pb://sql/execute/@sql3	javascript:pb.db.execute(sql3) or javascript:pb.db.update(sql3)
Prompt SQL for confirmation, then Execute update statement	pb://sql/prompt/sql	pb://sql/prompt/@sql3	javascript:pb.db.prompt(sql3) or javascript:pb.db.confirm(sql3)
execute SQL by id, return json result		pb.db.executeById(sqlid, args[], callback)	pb.db.executeById(sqlid, args[], callback)
run SQL Query by id, return json result		pb.db.queryById(sqlid, args[], callback)	pb.db.queryById(sqlid, args[], callback)

Work with Powerbuilder

call powerbuilder customized window/function, which stored in extert pbl file.

Description	Syntax	url protocol	javascript
Open PB window object	pb://window/winName	pb://window/w_about	javascript:pb.window('w_about')
Open PB window with parameters	pb://window/winName/parm	pb://window/w_web_dialog/top=20,width=800,url=https://google.com	javascript:pb.window('w_web_dialog','left=50,height=500,url=https://google.com')

Call PB Global Function, return string	pb://function/funcName/parm	pb://function/f_get_product	javascript:pb.function('f_get_product')

Session / Global Variables

Session is important for applicaiton development. After page loaded, ``pb.session``` serves as session object sharing information between different pages.

initialized by powerpage.ini	[session] var1 = name: PowerPage	javascript:alert(pb.session.version)	javascript:alert(pb.session('version'))
support json value. e.g. {"key":"value"}	[session] var2 = user: { "id":"admin", "role":"admin" }	javascript:alert(JSON.stringify(pb.session.user))	javascript:alert(JSON.stringify(pb.session('user')))
update session variables	pb://session/name/value	pb://session/about/new description [check]	javascript:pb.session('about','new description') [check]

Url Navigation / Misc

Misc..

open link in popup dialog (share session info)	pb://popup/width=?,height=?,url=?	pb://popup/height=500,url=dialog.html	javascript:pb.popup('width=800,url=dialog.html')
popup dialog with callback	pb://callback/?/popup/width=?,height=?,url=?	pb://callback/mycallback/popup/height=500,url=dialog.html	javascript:pb.popup('width=500,url=dialog.html','mycallback')
open url in same window	window.location=url	markdown.html	javascript:window.location='markdown.html'
Print, Preview, PageSetup	pb://print/[now|preview|setup]	pb://print, pb://print/now, pb://print/preview, pb://print/setup	javascript:pb.print(), javascript:pb.print('preview')
PDF Report Generation	pb://pdf/[open|print|dialog|div] [/querySelector]	pb://pdf, pb://pdf/open, pb://pdf/print, pb://pdf/dialog	javascript:pb.pdf(), javascript:pb.pdf('open'), javascript:pb.pdf('print')
Select Elements for PDF report	pb://pdf/[now|print|div|id][/querySelector]	pb://pdf/div/*brief,*global,.sample, pb://pdf/open/p,hr,button	javascript:pb.pdf('div','#brief,#global,.sample'), javascript:pb.pdf('print','p,hr,button')
Misc	navigator.userAgent	Popup Google	Goto Google	Invalid Url	window.close()