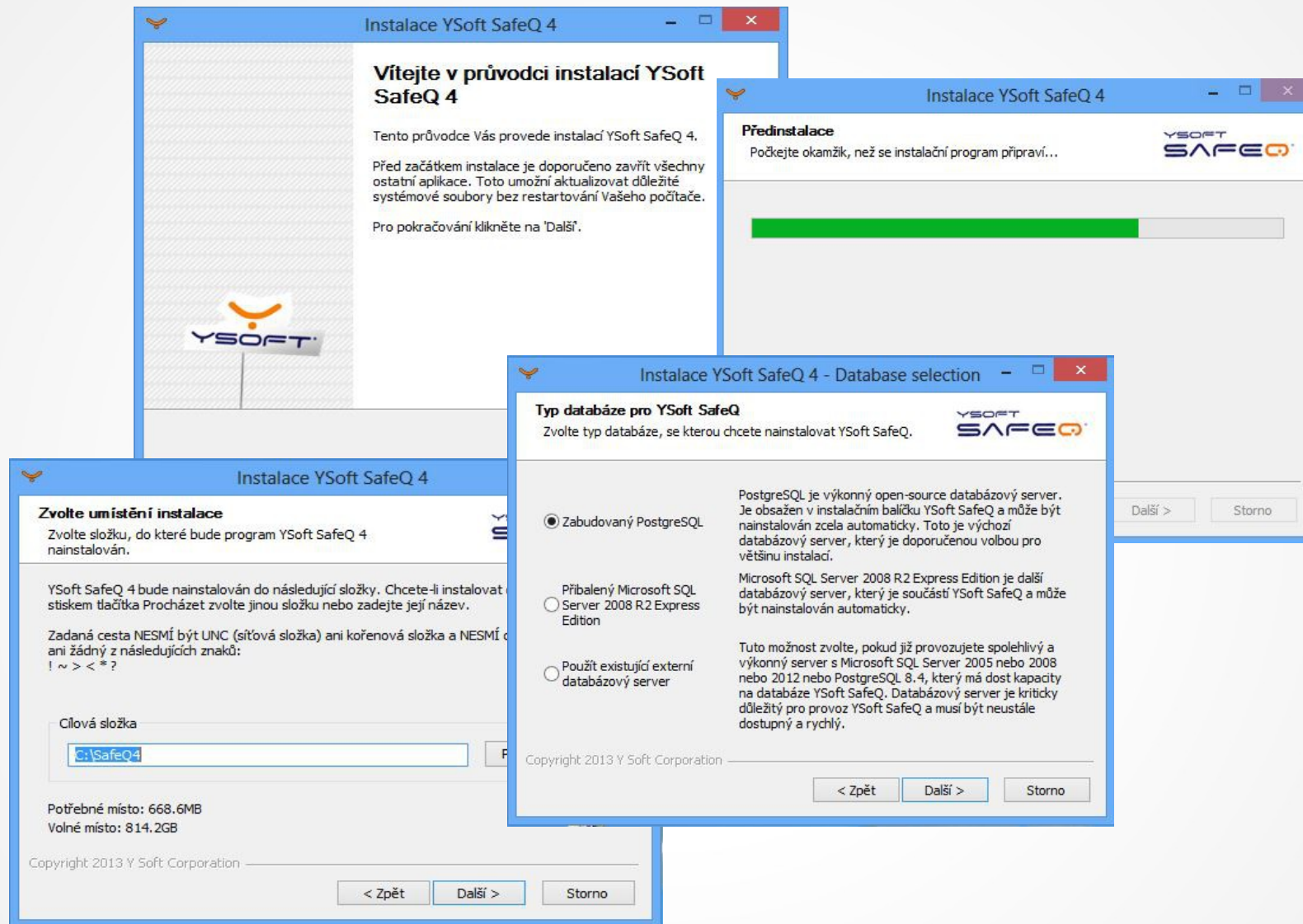


# Powershell UI Automation

# Installer



# Installer

Need of automated tests!

# Tool requirements

- Low cost (free)
- Fast & simple implementation
  - Simple use by CI system
- Step-by-step screenshot generation

# Powershell UIAutomation

- Open Source Powershell module
- Wide range of supported UI operations
- Based on the UI Automation API
- Supports Win32, Windows Forms, WPF, Metro UI, Java SWT, PowerBuilder, Delphi
- Requires Powershell 2.0+ and .NET 3.5+

# Installation

- Download

*<http://uiautomation.codeplex.com>*

- Extract

*~\Documents\WindowsPowershell\Modules*

- Run Powershell and import

*Import-Module (ipmo)*

# Available actions

- Getting window (Get-UIAWindow)
- Getting components (Get-UIAButton)
- Invoking actions (Invoke-UIACheckBoxToggle)
- Setting values (Set-UIAEditText)
- Getting values (Get-UIAEditText)
- Browsing menu (Get-UIAMenuItem, Invoke-UIAMenuItem)
- Checking state (Test-UIAControl)
- Screenshots (Save-UIAScreenshot)
- Start-UIARecorder

# Passing Automation Object

- Parameter

```
$btn = Get-UIAButton -Name „Next“
```

```
Invoke-UIAButtonClick -InputObject $btn
```

- Through pipe

```
Get-UIAButton -Name „Next“ | Invoke-UIA...
```



# Options

- Local parameters

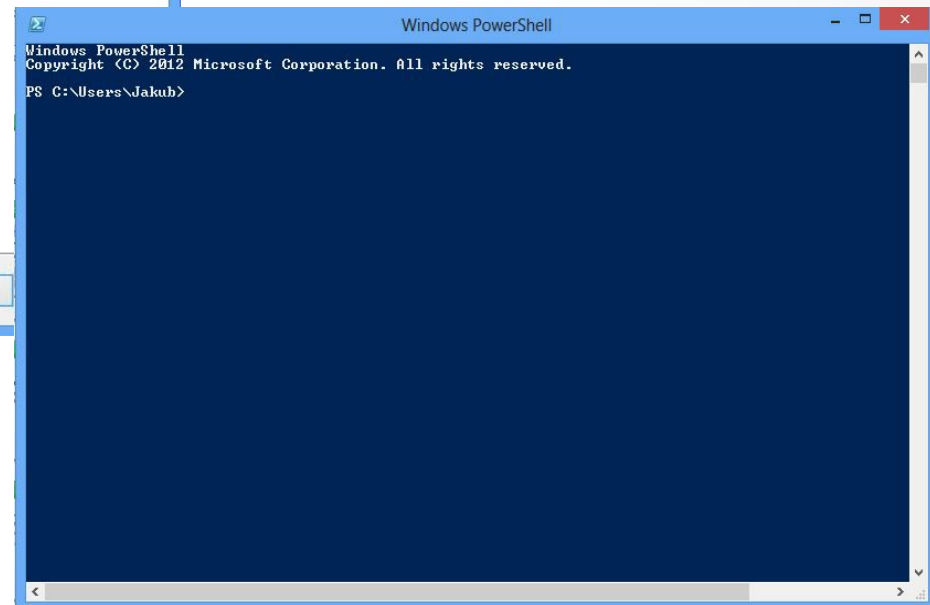
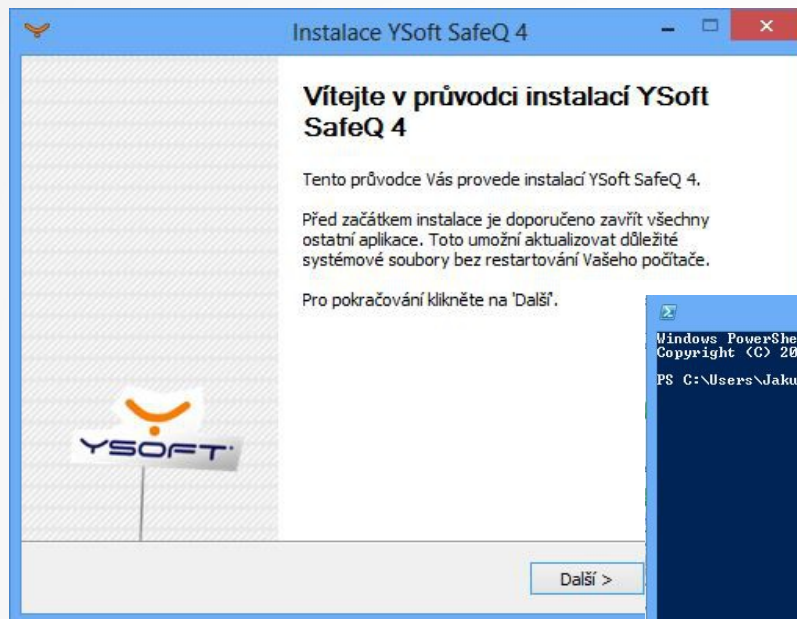
```
Get-UIAButton -Name „Next“ -Timeout 60
```

- Global settings

```
[UIAutomation.Preferences]::Timeout = 60
```

```
[UIAutomation.Preferences]::Highlight = $false
```

# Examples



# Powershell UIA Pros

- Free of charge
- Fast and simple implementation
- Easy integration with CI
- Simple screenshot generation
- Powershell!

# Powershell UIA Cons

- Lack of documentation
- Last update in February 2013, still Beta
- Some functions missing (Wait-For...)

# Gotchas

- Loosing focus on window
- Sometime needs to set focus on element
- User account issues
- Problems with CI execution via RD

# Literature

- <http://msdn.microsoft.com> (UIA API, .NET)
- <http://uiautomation.codeplex.com>
- <http://softwaretestingusingpowershell.com>