# **Design Manual**

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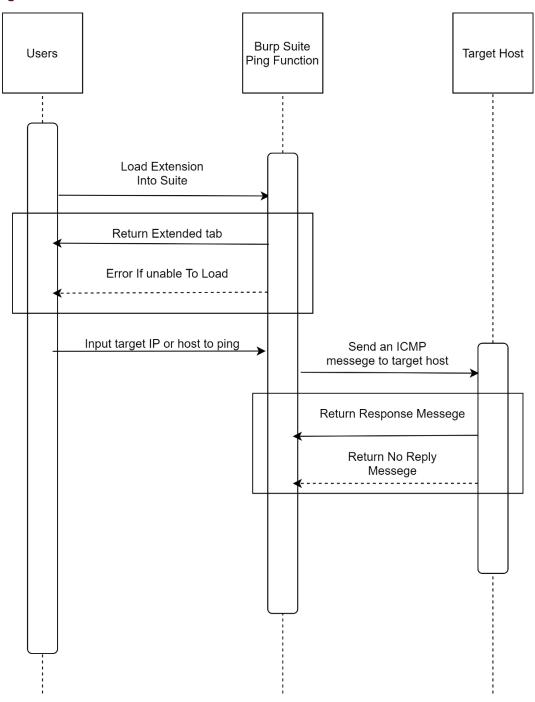
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#### Introduction

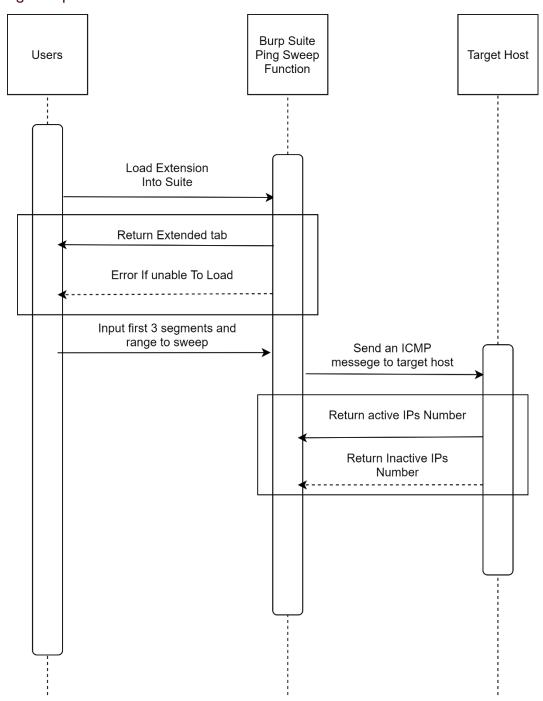
In this document we will be going through the design specification for the function tabs for the extensions we will be creating. We will go through each of the functions and their sequences. After this we will then go through a brief description of the layouts of the function tabs along with a simple wireframe mock-up of the layout.

# Sequence Diagrams

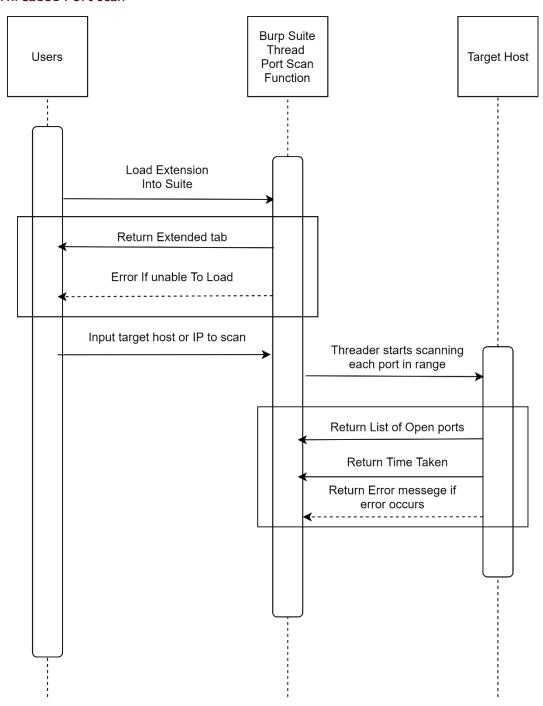
## Ping Function



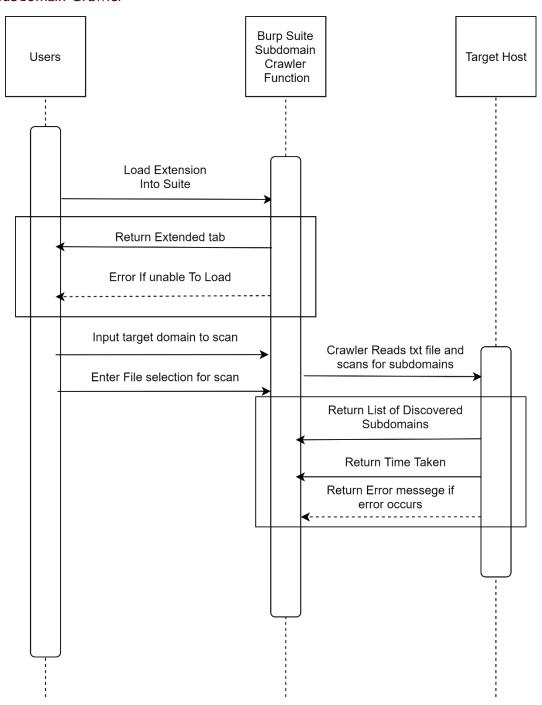
## Ping Sweep Function



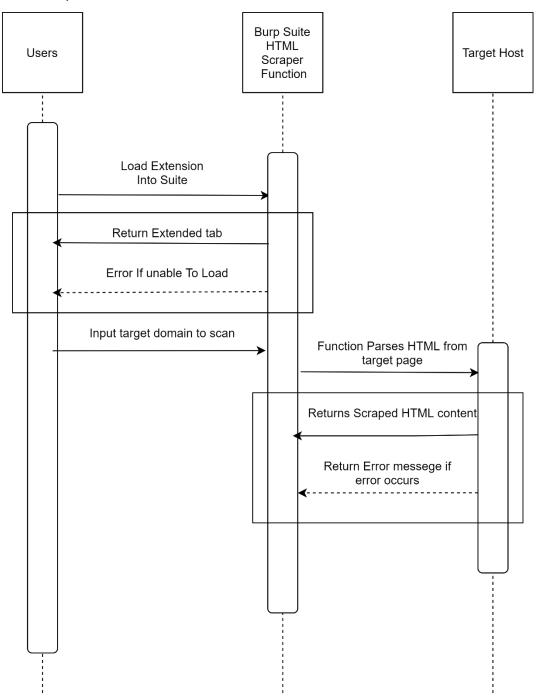
#### Threaded Port scan



#### Subdomain Crawler



## HTML Scraper



## User Interface Examples

#### **GUI** Code

For the actual GUI creation, the code was the same the whole way through. It firstly consisted of creating the actual tabs and sub tabs for the input and result boxes to sit on. This was done using a mix of Burps callbacks feature and using java swing to create JPanels and JTabbedPanes. (See Fig. 1)

For the input and output boxes, I used JPanels and Boxes to create the necessary input and output boxes. For all the input and output boxes the code repeated itself except for box sizes and labels. (See Fig. 2

The Final step in the GUI creation was to make the buttons, using JPanels and JButtons to create and link these buttons to the function. After this the buttons were added to the appropriate tab. (See Fig. 3)

```
class BurpExtender(IBurpExtender, ITab):
   def registerExtenderCallbacks(self, callbacks):
       sys.stdout = callbacks.getStdout()
       self.callbacks = callbacks
       self.callbacks.setExtensionName("Project Tab")
       self.tab = swing.JPanel(GridLayout())
       ### SUB TABS
       tabbedPane = swing.JTabbedPane()
       self.tab.add("Center", tabbedPane)
       tab1 = swing.JPanel()
       tab1.layout = GridLayout(2,3) #Gives tabs a grid layout
       tabbedPane.addTab("Ping", tab1)
       tab3 = swing.JPanel()
       tab3.layout = GridLayout(2,1)
       tabbedPane.addTab("Threaded Port Scanner", tab3)
       tab4 = swing.JPanel()
       tab4.layout = GridLayout(2,3)
       tabbedPane.addTab("Sub Domain", tab4)
       tab2 = swing.JPanel()
       tab2.layout = GridLayout(2,1)
       tabbedPane.addTab("Scraper", tab2)
```

Fig. I

Fig. 2

```
### INPUT BOX ###
inputPanel = swing.JPanel()
boxVert = swing.Box.createVerticalBox()
boxHori = swing.Box.createHorizontalBox()
inputLabel = swing.JLabel("Target host/IP")
boxHori.add(inputLabel)
boxVert.add(boxHori)
boxHori = swing.Box.createHorizontalBox()
self.inputArea = swing.JTextArea('', 1, 25)
self.inputArea.setLineWrap(True)
boxHori.add(self.inputArea)
boxVert.add(boxHori)
inputPanel.add(boxVert)
```

### BUTTONS ###
## button creation
buttonPanel2 = swing.JPanel()
buttonPanel2.add(swing.JButton('Scrape', actionPerformed=self.scraper))
tab2.add(buttonPanel2)

buttonPanel3 = swing.JPanel()
buttonPanel3.add(swing.JButton('Scan', actionPerformed=self.scan))
tab3.add(buttonPanel3)

buttonPanel4 = swing.JPanel()
buttonPanel4.add(swing.JButton('Lookup', actionPerformed=self.lookup))
tab4.add(buttonPanel4)

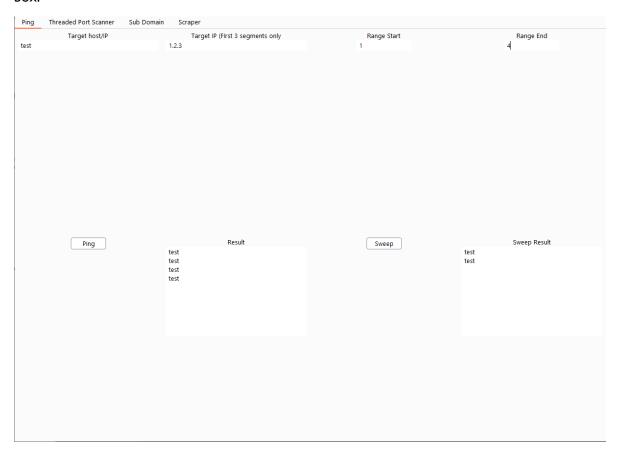
Fig. 3

#### Ping and Ping Sweep

Below is a screenshot of the Ping and ping sweep functions. Instead of having a separate tab for each function, it made more sense to have them on the same tab.

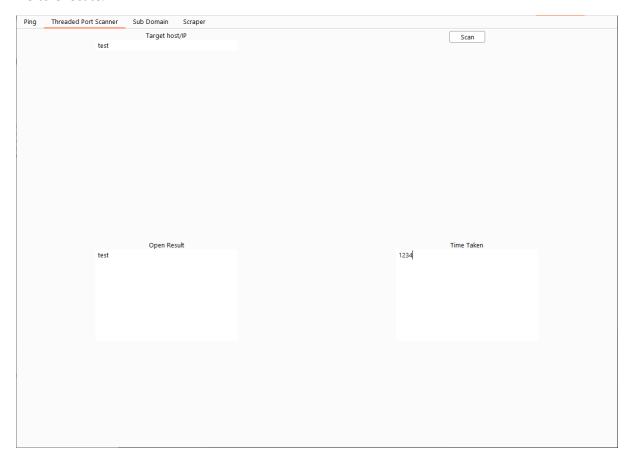
The tab consists of two rows, the input row being on top, and the button/results row on the bottom. Users can enter in a target IP on the leftmost input field, press the "Ping" Button directly below and get their results in the text box to the right of the button.

For the sweep, there is an input field, for the first three segments of the target IP, then two smaller fields for the start range and end range. Below this is another button marked "Sweep" and a results box.



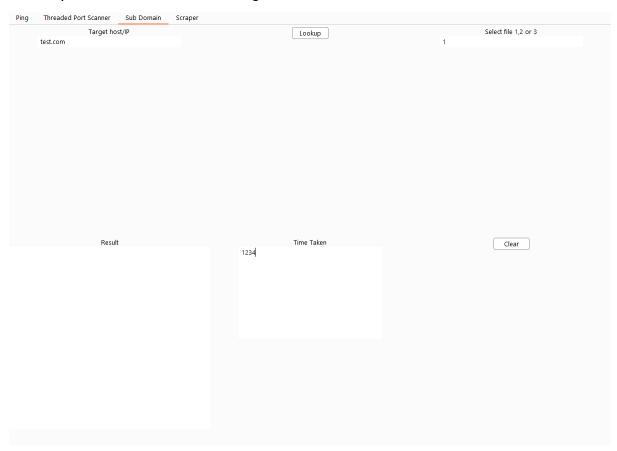
## Threaded Port Scan

Below is a screenshot of the Threaded Port Scanner tab. The tab consists of an input text box, the button used to execute the script, the results box and another text box for the time taken for the file to execute.



#### Subdomain Crawler

Below is a screenshot of the Subdomain Crawler function tab. The tab consists of a input field for the target domain, another input field on the top right for file selection, a button in the middle for execution of code, a result box on the bottom left, another box in the middle for the time taken, and finally a button on the left for clearing the results box.



## **HTML** Scraper

Below is a screenshot for the HTML Scraper function tab. The tab consists of a input box for the target to be scraped, with instructions, the button which will execute the code and finally the result box where our output will be displayed.

