

GitHub - sensepost/notruler: The opposite of Ruler, provides blue teams with the ability to detect Ruler usage against Exchange.

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Introduction

NotRuler is the opposite of [Ruler](#). The tool aims to make life a little easier for Exchange Admins by allowing for the detection of both client-side rules and VBScript enabled forms. At a minimum this should allow for the detection of all attacks created through [Ruler](#).

NotRuler allows you to interact with Exchange servers remotely, through either the MAPI/HTTP or RPC/HTTP protocol.

What does it do?

NotRuler can query one or more Exchange mailboxes and detects client-side Outlook rules and VBScript enabled forms.

- Allows Exchange Admins to check for compromise
- Check your own account for compromise
- Extract stager address for Malicious rules
- Extract VBScript used in forms
- Check for 'homepage' and extract URL

Getting Started

Compiled binaries for Linux, OSX and Windows are available. Find these in [Releases](#) information about setting up Ruler from source is found in the [getting-started guide].

NotRuler has two modes of operation:

- Rules -- check for client-side rules
- Forms -- check for VBScript enabled forms
- Homepage -- check for a custom homepage

Rules

The current version of NotRuler can check either a single or multiple mailboxes. These are supplied in the program arguments.

To check multiple mailboxes, create a file with one account per line:

```
john.ford@testdomain.com  
henry.hammond@testdomain.com  
james.smith@testdomain.com  
cindy.shell@testdomain.com
```

Using the Exchange Admin account, you should be able to log into any mailbox on the Exchange server:

```
./notruler --username exchangeadmin --mailboxes /path/to/mailbox.list rules
```

You can also check your own account by using `--self`

```
./notruler --username john.ford@testdomain.com --mailbox john.ford@testdomain.com --self rules
```

Sample output:

```
[+] Checking [john.ford@testdomain.com]  
[+] Found 5 rules  
[WARNING] Found client-side rule: [01000000d97851c4:pewpew3] Application: [\\myhost.somewhere.darkside.com\dav\r  
[WARNING] Found client-side rule: [01000000d97851b9:pewpew] Application: [\\myhost.somewhere.darkside.com\dav\b  
[+] Checking [cindy.shell@testdomain.com]  
[+] No Rules Found  
[+] Checking [henry.hammond@testdomain.com]  
[+] No Rules Found  
[+] Checking [james.smith@testdomain.com]  
[+] No Rules Found
```

Forms

Same as with Rules, you need to either have a list of mailboxes or a single mailbox to check. Simply swap "rules" for "forms":

Using the Exchange Admin account, you should be able to log into any mailbox on the Exchange server:

```
./notruler --username exchangeadmin --mailboxes /path/to/mailbox.list forms
```

You can also check your own account by using `--self`

```
./notruler --username john.ford@testdomain.com --mailbox john.ford@testdomain.com --self forms
```

Sample output:

```
[+] Checking [john.ford@testdomain.com]
[WARNING] Found form with VBScript! [IPM.Note.badform]
    Function P()
CreateObject("Wscript.Shell").Run "powershell.exe -NoP -sta -NonI -W Hidden -Enc WwBTAFkAUwB0AEUAbQAUAE4AZQBUAQ4"

[+] Checking [cindy.shell@testdomain.com]
[+] Checking [henry.hammond@testdomain.com]
[+] Checking [james.smith@testdomain.com]
```

Homepage

And the same again, you need to either have a list of mailboxes or a single mailbox to check.

Using the Exchange Admin account, you should be able to log into any mailbox on the Exchange server:

```
./notruler --username exchangeadmin --mailboxes /path/to/mailbox.list homepage
```

You can also check your own account by using `--self`

```
./notruler --username john.ford@testdomain.com --mailbox john.ford@testdomain.com --self homepage
```

Sample output:

```
[+] Checking [john.ford@testdomain.com]
[WARNING] Found endpoint: http://attack.attackpew.com/rce.html
[+] Webview is set as ENABLED
[+] Checking [cindy.shell@testdomain.com]
[+] Checking [henry.hammond@testdomain.com]
[+] Checking [james.smith@testdomain.com]
```

IOCs

I've added a list of IOC's here: [iocs.md](#)

Feel free to submit Issues/PRs with further IOCs!

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Source: <https://github.com/sensepost/notruler>