



Internal Resources

How to use F5 BIG-IP Load Traffic Manager to inject the JS Bootstrap Agent

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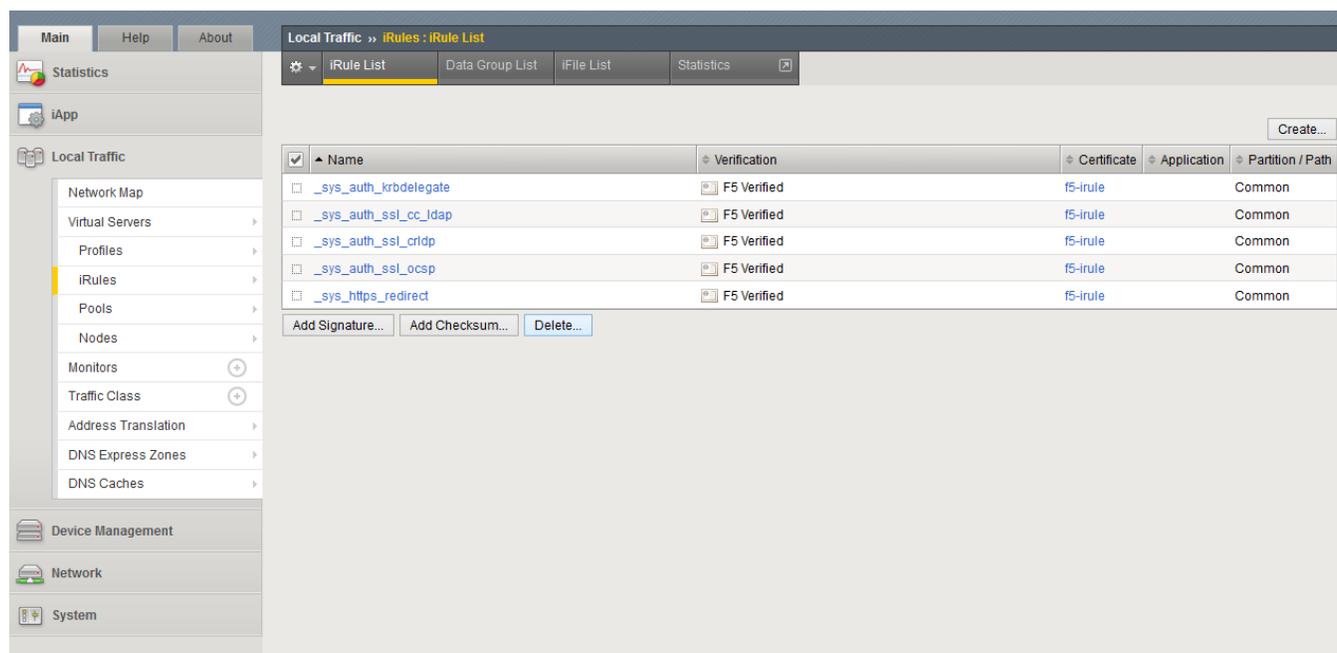
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i This article talks about the Javascript Bootstrap Agent - a feature that is available since Dynatrace 6.2.

It is possible to use the JavaScript Bootstrap Agent in combination with F5 BIG-IP LTM. So-called "iRules" provide functionality to inject the necessary script tag to every page that should be monitored.

iRules can be added within the LTM configuration manager: Local Traffic --> iRules --> "Create..." button on the upper right



After assigning a name to the rule, the script can be pasted within the "definition" textarea. The third line has to be edited to match the system profile configuration, e.g. "agentpath" must be replaced with the agent path (in case of uemonly, the path to the uem aas server) and "yourApp" with an application name that matches the ones configured in the system profile.

```

when RULE_INIT {
    set static::jscript {
        <script type="text/javascript" src="agentpath/dtagent_bootstrap.js?app=yourApp"></script>
    }
}

when HTTP_REQUEST {
    # Explicitly disable STREAM and COMPRESS by default for each request so it doesn't stay enabled for
    # subsequent HTTP requests on the same TCP Connection
    # Stream will be enabled explicitly upon JavaScript insertion
    STREAM::disable
    COMPRESS::disable
    # If using F5 TM v 10.0 - 10.2.0, please comment out the HTTP::path line and uncomment HTTP::uri line to
    # bypass a known issue where the query string is truncated if present
    # Logged with F5 as CR142756
    # HTTP path is more efficient to use as HTTP uri includes the query string, so it is the default way to
    # obtain the HTTP path
    # set page_extension [string tolower [HTTP::uri]]
    set page_extension [string tolower [HTTP::path]]
}

when HTTP_RESPONSE {
    if { [HTTP::status] == 200 } {
        if {[HTTP::header value Content-Type] contains "text"} {
            set stream_find "<HEAD>"
            set stream_find_lower "<head>"
            set stream_repl ""
            set insertJscript 1

            # Do not allow the Javascript insertion if the pages end with the following
            switch -glob $page_extension {
                "*.ashx*" -
                "*.asmx*" -
                "*.axd*" -
                "*.js*" {
                    set insertJscript 0
                }
                default {
                    if { [HTTP::payload] contains "META HTTP-EQUIV=\\"Refresh\\""} {
                        set insertJscript 0
                    }
                }
            }

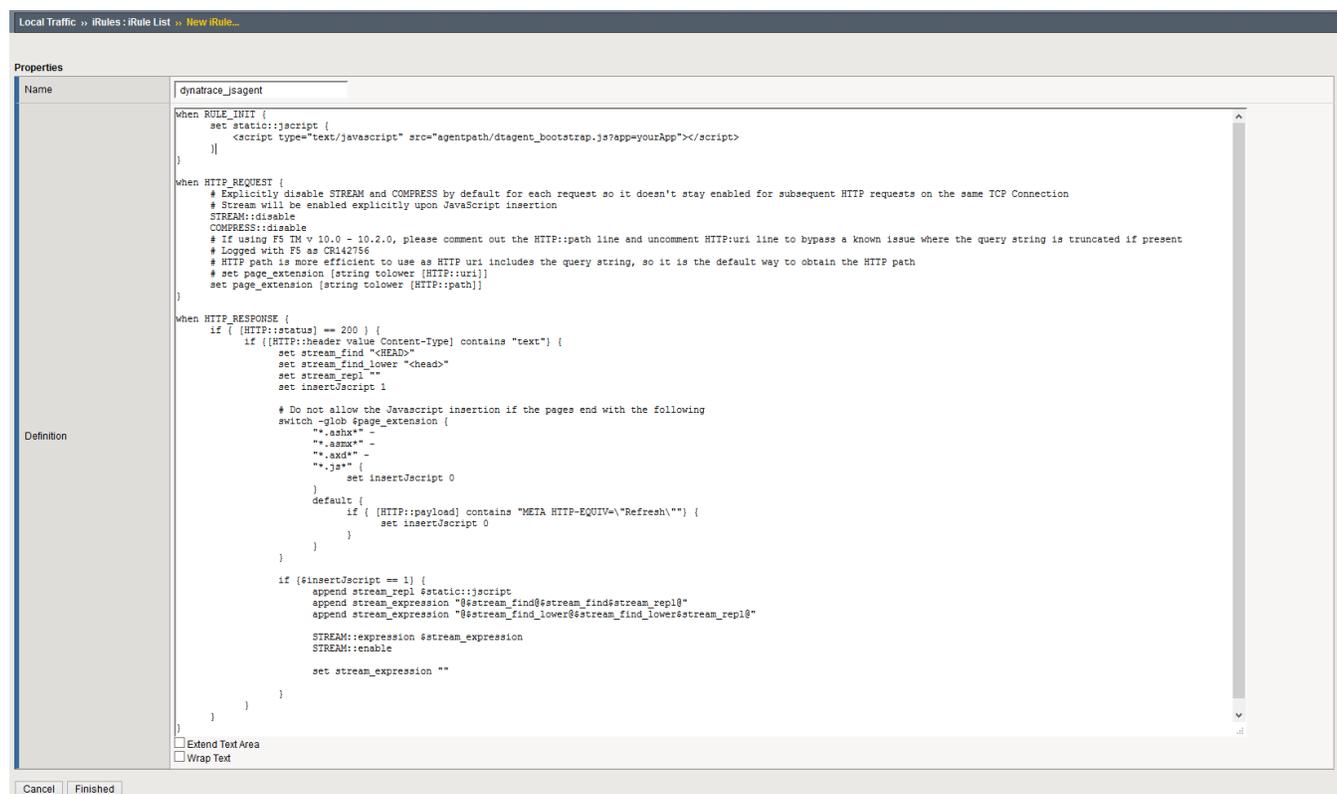
            if {$insertJscript == 1} {
                append stream_repl $static::jscript
                append stream_expression "@$stream_find@$stream_find$stream_repl@"
                append stream_expression "@$stream_find_lower@$stream_find_lower$stream_repl@"

                STREAM::expression $stream_expression
                STREAM::enable

                set stream_expression ""
            }
        }
    }
}

```

How to use F5 BIG-IP Load Traffic Manager to inject the JS Bootstrap Agent



The screenshot shows the 'New Rule' configuration window in the F5 BIG-IP interface. The rule is named 'dynatrace_jsagent'. The configuration is divided into 'Properties' and 'Definition' sections.

Properties:

- Name: dynatrace_jsagent

Definition:

```
When RULE_INIT {
  set static::javascript {
    <script type="text/javascript" src="agentpath/dtagent_bootstrap.js?app=yourApp"></script>
  }
}

When HTTP_REQUEST {
  # Explicitly disable STREAM and COMPRESS by default for each request so it doesn't stay enabled for subsequent HTTP requests on the same TCP Connection
  # Stream will be enabled explicitly upon JavaScript insertion
  STREAM:disable
  COMPRESS:disable
  # If using FS TM v 10.0 - 10.2.0, please comment out the HTTP::path line and uncomment HTTP::uri line to bypass a known issue where the query string is truncated if present
  # Logged with FS as CR142756
  # HTTP path is more efficient to use as HTTP uri includes the query string, so it is the default way to obtain the HTTP path
  # set page_extension [string tolower {HTTP::uri}]
  set page_extension [string tolower {HTTP::path}]
}

When HTTP_RESPONSE {
  if { [HTTP::status] == 200 } {
    if { [HTTP::header value Content-Type] contains "text" } {
      set stream_find "cHEAD"
      set stream_find_lower "head"
      set stream_repl ""
      set insertJsScript 1

      # Do not allow the Javascript insertion if the pages end with the following
      switch -glob $page_extension {
        *.ashx* -
        *.aspx* -
        *.axd* -
        *.js* {
          set insertJsScript 0
        }
        default {
          if { [HTTP::payload] contains "META HTTP-EQUIV=\"Refresh\"" } {
            set insertJsScript 0
          }
        }
      }
    }
  }

  if { $insertJsScript == 1 } {
    append stream_repl $static::javascript
    append stream_expression "$stream_find$stream_repl"
    append stream_expression "$stream_find_lower$stream_repl"

    STREAM:expression $stream_expression
    STREAM:enable

    set stream_expression ""
  }
}

 Extend Text Area
 Wrap Text
```

Buttons: Cancel, Finished

A click on "Finished" enables the injection rule.

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