**Manual patching for JBoss EAP implementation and rollback out plan**

**Pre Requisites**

1. List the servers to apply the patch and get the approvals from all the stack holders
2. Check the available disk space minimum 2 GB
3. Download the latest binaries and place in a folder
4. Check the current version of JBoss EAP servers
5. Estimate the change window time to apply the patch, maximum time per server is 15 minutes

The Command Line Interface of the JBoss Enterprise Application Platform (EAP) contains a command to apply minor updates and patches without changing individual files manually.

Red Hat provides the patches and updates via the customer portal as download. After downloading a single or bundled patch from the customer portal, the patch can be applied with the patch command of the Command Line Interface (CLI).

**Implementation plan:**

1. **Check the current version of the jboss eap**

#cat $JBOSS-HOME/version.txt

Red Hat JBoss Enterprise Application Platform - Version 6.4.0.GA

1. Download the application server libraries from the redhat portal and place in a folder.
2. Apply the patch by using the patch command post connection of CLI using the command jboss-cli.sh inside the JBOSS-HOME/bin.

[standalone@localhost:9999 /] patch apply path/to/jboss-eap-6.4.1-patch.zip –override-modules

{

"outcome" : "success",

"result" : {}

}

[standalone@localhost:9999 /]

1. **Check the history of the installed patches using the patch history command**

[standalone@localhost:9999/] patch history

{

    "outcome" : "success",

    "result" : [

        {

            "patch-id" : "jboss-eap-6.4.6.CP",

            "type" : "cumulative",

            "applied-at" : "4/6/16 4:00 PM"

        },

        {

            "patch-id" : "jboss-eap-6.4.5.CP",

            "type" : "cumulative",

            "applied-at" : "4/6/16 4:00 PM"

        },

        {

            "patch-id" : "jboss-eap-6.4.4.CP",

            "type" : "cumulative",

            "applied-at" : "4/6/16 4:00 PM"

        },

        {

            "patch-id" : "jboss-eap-6.4.3.CP",

            "type" : "cumulative",

            "applied-at" : "4/6/16 4:00 PM"

        },

        {

            "patch-id" : "jboss-eap-6.4.2.CP",

            "type" : "cumulative",

            "applied-at" : "4/6/16 4:00 PM"

        },

        {

            "patch-id" : "jboss-eap-6.4.1.CP",

            "type" : "cumulative",

            "applied-at" : "4/6/16 4:00 PM"

        }

}

1. Check the current version of the jboss eap containing in the last patch applied.

#cat $JBOSS-HOME/version.txt

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1. **Clear the jboss patch history post connection of the CLI by running the following command.**

/core-service=patching:ageout-history

1. **Restart the server.**

**Rollback plan:**

If the application was not supporting the latest version of the jboss eap, after getting the confirmation from the development team we will implement the rollback plan.

1. **Rollback the previously installed patches by using the patch rollback command as follows**

[standalone@localhost:9999/] patch rollback --patch-id=jboss-eap-6.4.5.CP --reset-configuration=true

{

    "outcome" : "success",

    "response-headers" : {

        "operation-requires-restart" : true,

        "process-state" : "restart-required"

    }

}

1. Check the history of the rollback by using the patch history command.

[standalone@localhost:9999/] patch history

{

    "outcome" : "success",

    "result" : [

        {

            "patch-id" : "jboss-eap-6.4.1.CP",

            "type" : "cumulative",

            "applied-at" : "4/6/16 4:00 PM"

        },

        {

            "patch-id" : "jboss-eap-6.4.2.CP",

            "type" : "cumulative",

            "applied-at" : "4/6/16 4:00 PM"

        },

        {

            "patch-id" : "jboss-eap-6.4.3.CP",

            "type" : "cumulative",

            "applied-at" : "4/6/16 4:00 PM"

        },

        {

            "patch-id" : "jboss-eap-6.4.4.CP",

            "type" : "cumulative",

            "applied-at" : "4/6/16 4:00 PM"

        },

        {

            "patch-id" : "jboss-eap-6.4.5.CP",

            "type" : "cumulative",

            "applied-at" : "4/6/16 4:00 PM"

        },

}

1. Check the current version of the jboss eap containing in the last patch applied.

#cat $JBOSS-HOME/version.txt

Red Hat JBoss Enterprise Application Platform - Version 6.4.0.GA

1. Restart the server.