

UNIVERSIDAD DE SAN CARLOS DE GUATEMALA

FACULTAD DE INGENIERIA

LABORATORIO DE SOFTWARE AVANZADO

PRACTICA 7



MANUAL DE USUARIO

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Obtener configuración del clúster desde s3:

```
Administrator: Windows PowerShell
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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Windows\system32> $env:KOPS_STATE_STORE = "s3://sa-practica7-kops-state"
```

Verificación de existencia del clúster:

```
Administrator: Windows PowerShell
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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Windows\system32> $env:KOPS_STATE_STORE = "s3://sa-practica7-kops-state"
PS C:\Windows\system32> kops get clusters
NAME                CLOUD  ZONES
sa-practica7.k8s.local  aws    us-east-1a
PS C:\Windows\system32> 
```

Verificación de disponibilidad del clúster:

```
Administrator: Windows PowerShell
PS C:\Windows\system32> kops validate cluster
Using cluster from kubectl context: sa-practica7.k8s.local

Validating cluster sa-practica7.k8s.local

INSTANCE GROUPS
NAME                                ROLE            MACHINETYPE  MIN  MAX  SUBNETS
control-plane-us-east-1a          ControlPlane    t3.small     1    1    us-east-1a
nodes-us-east-1a                  Node           t3.small     1    1    us-east-1a

NODE STATUS
NAME                                ROLE            READY
i-04281b104b1ead35d               node            True
i-0d16e0f23ba184443               control-plane   True

Your cluster sa-practica7.k8s.local is ready
PS C:\Windows\system32>
```

Mostrar todos los despliegues del clúster actualmente:

```
Administrator: Windows PowerShell
PS C:\Windows\system32>
PS C:\Windows\system32> kubectl get all -n sa-p7

NAME                                READY   STATUS    RESTARTS   AGE
pod/equipos-5dbd48cdd6-fzvs5        1/1     Running   0           99m
pod/mantenimiento-7b77ff95b-nnftx    1/1     Running   0           99m
pod/reportes-866b55d78f-j6nhz       1/1     Running   0           99m
pod/ubicaciones-6dd55f44b5-6z9h8     1/1     Running   0           99m

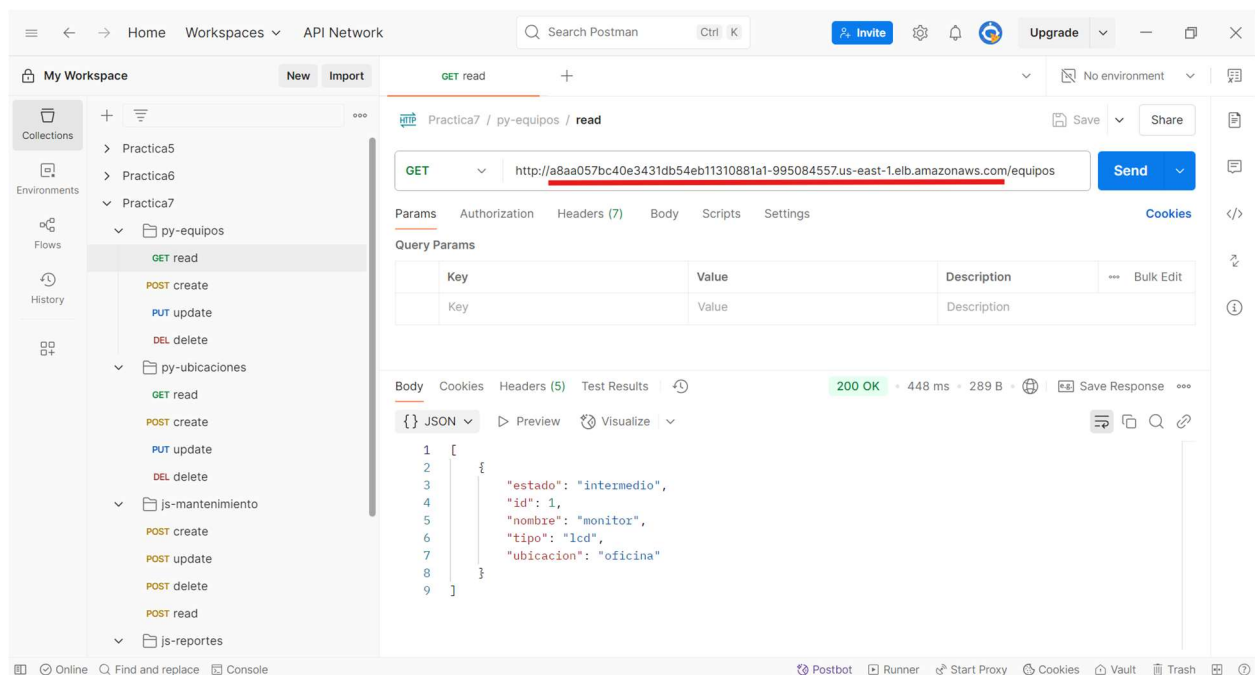
NAME                                TYPE          CLUSTER-IP   EXTERNAL-IP  PORT(S)    AGE
service/equipos                     ClusterIP      100.69.59.169 <none>       8081/TCP   99m
service/mantenimiento                ClusterIP      100.64.64.112 <none>       8083/TCP   99m
service/reportes                     ClusterIP      100.66.97.0   <none>       8084/TCP   99m
service/ubicaciones                  ClusterIP      100.69.236.86 <none>       8082/TCP   99m

NAME                                READY   UP-TO-DATE   AVAILABLE   AGE
deployment.apps/equipos              1/1     1             1           99m
deployment.apps/mantenimiento         1/1     1             1           99m
deployment.apps/reportes              1/1     1             1           99m
deployment.apps/ubicaciones           1/1     1             1           99m
```

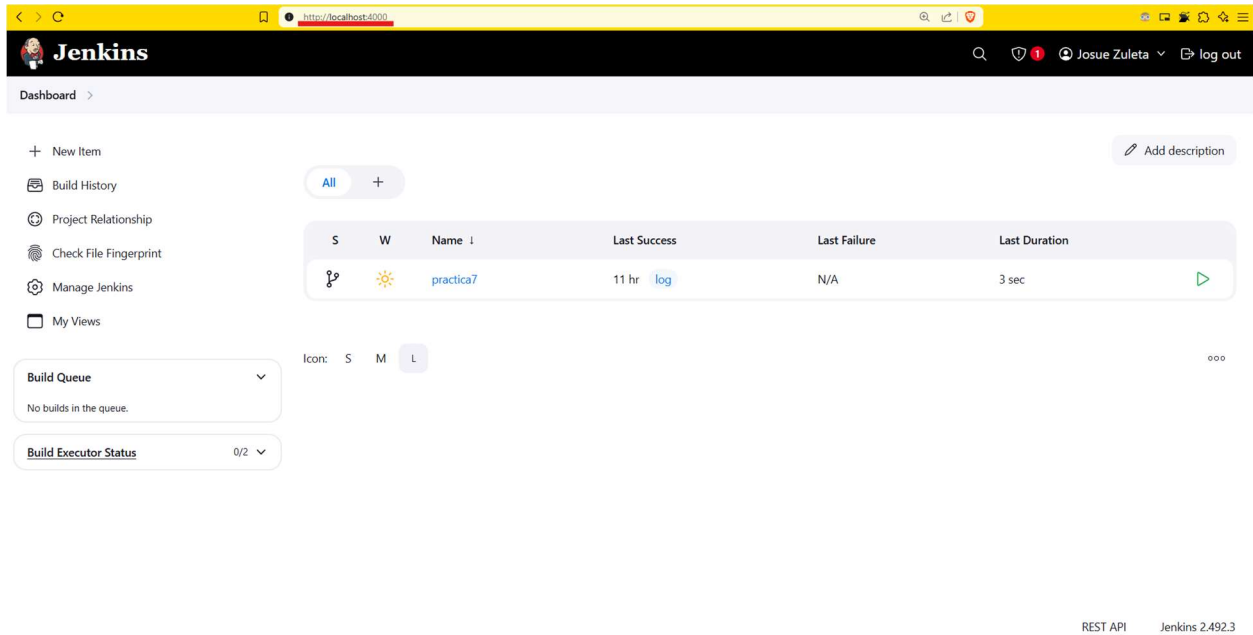
Obtener el Ingress:

```
Administrator: Windows PowerShell
PS C:\Windows\system32> kubectl get ingress -n sa-p7
NAME          CLASS    HOSTS          ADDRESS          PORTS    AGE
my-ingress    nginx   *             a8aa057bc40e3431db54eb11310881a1-995084557.us-east-1.elb.amazonaws.com 80       6h15m
PS C:\Windows\system32>
```

Realizar peticiones desde un cliente (postman):



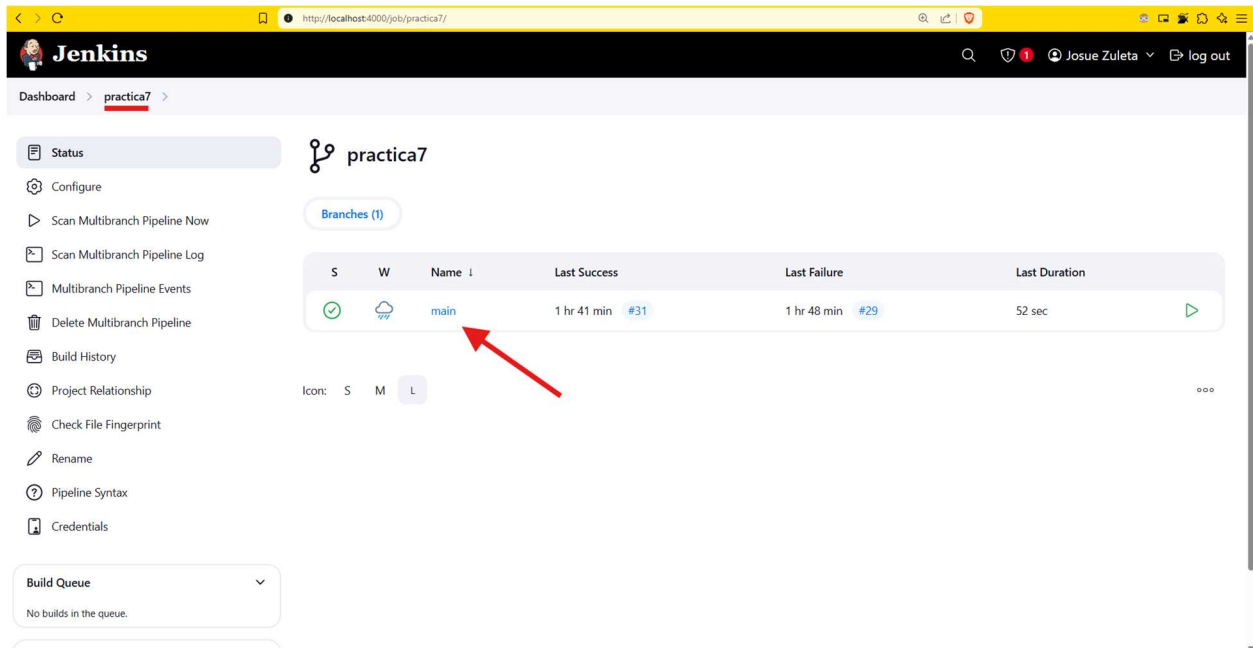
Interfaz gráfica de Jenkins:



The screenshot shows the Jenkins Dashboard interface. The top navigation bar includes the Jenkins logo, a search icon, a shield icon with a red exclamation mark, the user name 'Josue Zuleta', and a 'log out' button. The main content area features a sidebar on the left with links: '+ New Item', 'Build History', 'Project Relationship', 'Check File Fingerprint', 'Manage Jenkins', and 'My Views'. The main panel displays a table of build history for the 'practica7' job. The table has columns for 'S' (Status), 'W' (Web icon), 'Name', 'Last Success', 'Last Failure', and 'Last Duration'. A single row is visible for 'practica7' with a status of 'S' (Success), a web icon, and a duration of '3 sec'. Below the table, there are buttons for 'Icon: S M L' and a 'REST API' link. The bottom right corner shows 'Jenkins 2.492.3'.

S	W	Name	Last Success	Last Failure	Last Duration
S		practica7	11 hr log	N/A	3 sec

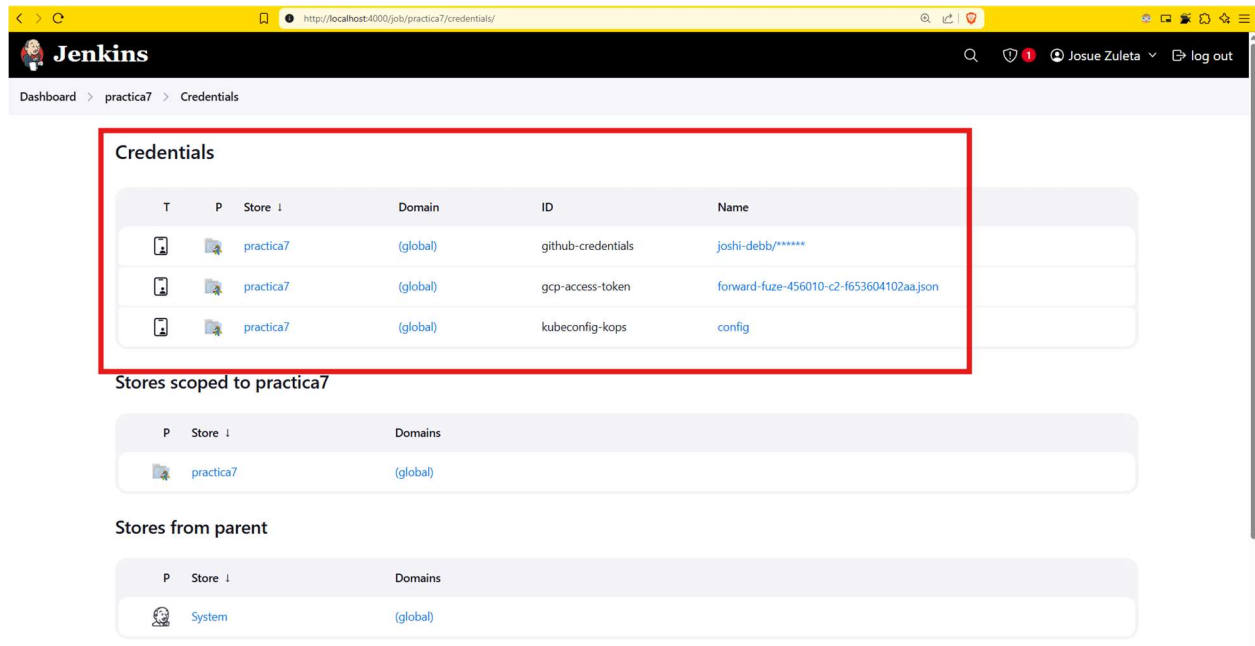
Proyecto automatizado por Jenkins:



The screenshot shows the Jenkins Job Configuration page for the 'practica7' job. The top navigation bar is the same as the dashboard. The main content area features a sidebar on the left with links: 'Status', 'Configure', 'Scan Multibranch Pipeline Now', 'Scan Multibranch Pipeline Log', 'Multibranch Pipeline Events', 'Delete Multibranch Pipeline', 'Build History', 'Project Relationship', 'Check File Fingerprint', 'Rename', 'Pipeline Syntax', and 'Credentials'. The main panel displays the 'practica7' job configuration. The 'Branches (1)' section shows a table of build history for the 'main' branch. The table has columns for 'S' (Status), 'W' (Web icon), 'Name', 'Last Success', 'Last Failure', and 'Last Duration'. A single row is visible for 'main' with a status of 'S' (Success), a web icon, and a duration of '52 sec'. A red arrow points to the 'main' branch name. Below the table, there are buttons for 'Icon: S M L' and a 'REST API' link. The bottom right corner shows 'Jenkins 2.492.3'.

S	W	Name	Last Success	Last Failure	Last Duration
S		main	1 hr 41 min #31	1 hr 48 min #29	52 sec

Credenciales activas para el manejo del pipeline:



The screenshot shows the Jenkins 'Credentials' page for the 'practica7' project. A red box highlights the 'Credentials' table, which lists three active credentials. Below the table, the 'Stores scoped to practica7' and 'Stores from parent' sections are visible.

T	P	Store	Domain	ID	Name
		practica7	(global)	github-credentials	joshi-debb/*****
		practica7	(global)	gcp-access-token	forward-fuze-456010-c2-f653604102aa.json
		practica7	(global)	kubeconfig-kops	config

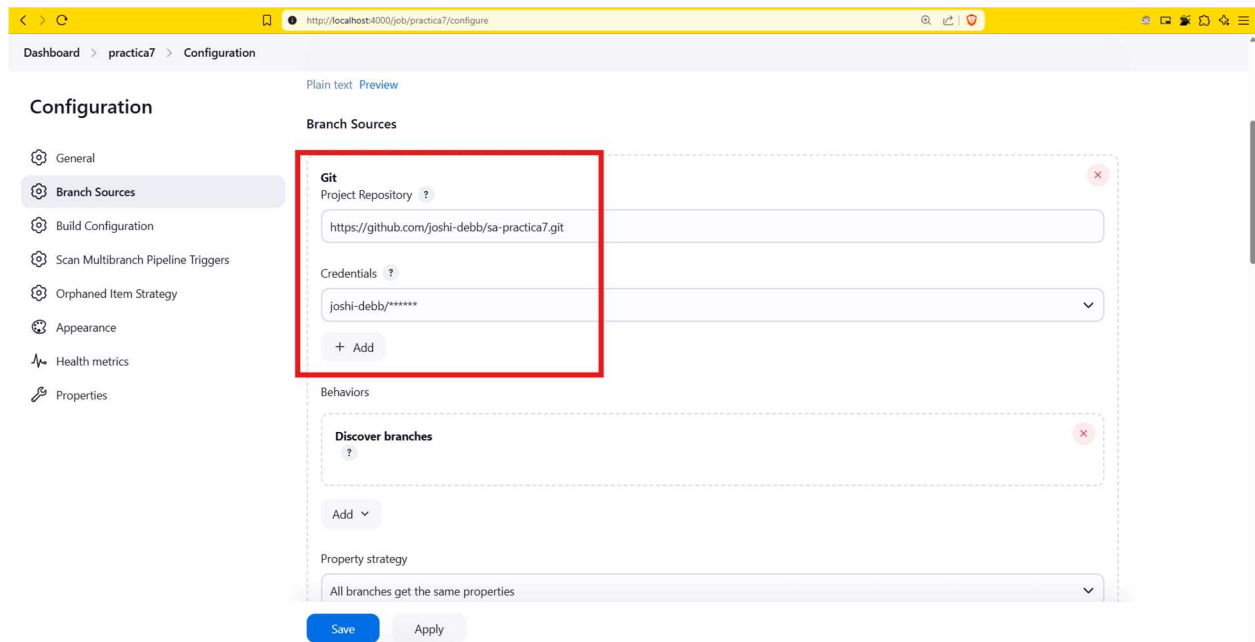
Stores scoped to practica7

P	Store	Domains
	practica7	(global)

Stores from parent

P	Store	Domains
	System	(global)

Configuración del origen código/ramas a monitorear:



The screenshot shows the Jenkins 'Configuration' page for the 'practica7' project. The 'Branch Sources' section is highlighted with a red box, showing the configuration for a Git repository. The 'Behaviors' section is also visible, showing the 'Discover branches' behavior.

Configuration

- General
- Branch Sources**
- Build Configuration
- Scan Multibranch Pipeline Triggers
- Orphaned Item Strategy
- Appearance
- Health metrics
- Properties

Branch Sources

Git

Project Repository ?
https://github.com/joshi-debb/sa-practica7.git

Credentials ?
joshi-debb/*****

+ Add

Behaviors

Discover branches

?

Add ▾

Property strategy
All branches get the same properties ▾

Save Apply

Rama monitoreada:

The screenshot shows the Jenkins Dashboard for a project named 'practica7'. The left sidebar contains a list of actions: Status, Configure, Scan Multibranch Pipeline Now, Scan Multibranch Pipeline Log, Multibranch Pipeline Events, Delete Multibranch Pipeline, Build History, Project Relationship, Check File Fingerprint, Rename, Pipeline Syntax, and Credentials. The 'Status' option is highlighted with a red arrow. The main content area displays the 'practica7' project status. A table lists the branches, with 'main' selected and highlighted by a red arrow. The table columns are: S (Status), W (Webhook), Name, Last Success, Last Failure, and Last Duration. The 'main' branch is shown with a green checkmark, a webhook icon, and a duration of 52 sec. Below the table, there are icons for S, M, and L. A 'Build Queue' section at the bottom indicates 'No builds in the queue.'

S	W	Name	Last Success	Last Failure	Last Duration
✓	🔗	main	1 hr 42 min #31	1 hr 49 min #29	52 sec

Construir el código actual:

The screenshot shows the Jenkins page for 'practica7/main'. The left sidebar contains a list of actions: Status, Changes, Build Now, View Configuration, Stages, and Pipeline Syntax. The 'Status' option is highlighted with a red arrow. The main content area displays the 'main' branch status. It shows the full project name 'practica7/main' and a list of 'Permalinks' for various builds. Below this, a 'Builds' section shows a list of builds with their status (green checkmark for success, red X for failure) and timestamps. The 'Builds' section is also highlighted with a red arrow.

Full project name: practica7/main

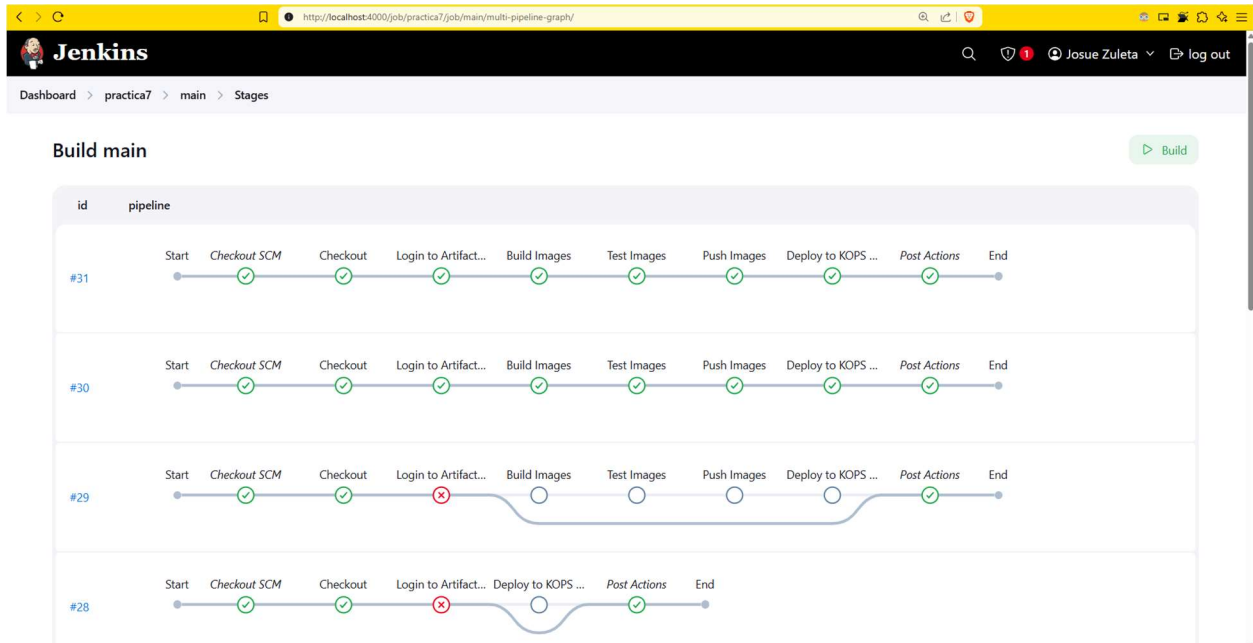
Permalinks

- Last build (#31), 1 hr 42 min ago
- Last stable build (#31), 1 hr 42 min ago
- Last successful build (#31), 1 hr 42 min ago
- Last failed build (#29), 1 hr 49 min ago
- Last unsuccessful build (#29), 1 hr 49 min ago
- Last completed build (#31), 1 hr 42 min ago

Builds

Build	Status	Time
#31	✓	2:40 AM
#30	✓	2:36 AM
#29	✗	2:33 AM
#28	✗	2:29 AM
#27	✗	2:28 AM
#26	✓	2:07 AM
#25	✓	2:00 AM

Estado de la construcción:



Historial y logs:

The Jenkins Dashboard shows the 'main' pipeline status. The 'main' pipeline is in a 'Completed' state. The 'Builds' section shows a list of builds, with build #27 highlighted by a red arrow.

Status ✓ main

Full project name: practica7/main

Permalinks

- Last build (#31), 1 hr 42 min ago
- Last stable build (#31), 1 hr 42 min ago
- Last successful build (#31), 1 hr 42 min ago
- Last failed build (#29), 1 hr 49 min ago
- Last unsuccessful build (#29), 1 hr 49 min ago
- Last completed build (#31), 1 hr 42 min ago

Builds

Build	Status	Time
#31	✓	2:40 AM
#30	✓	2:36 AM
#29	✗	2:33 AM
#28	✗	2:29 AM
#27	✗	2:28 AM
#26	✓	2:07 AM
#25	✓	2:00 AM