

CloudForge CLI Reference

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Installation

macOS

```
brew install novatech/tap/cloudforge
```

Linux

```
curl -fsSL https://get.cloudforge.novatech.com | sh
```

Windows

```
winget install NovaTech.CloudForge
```

Verify Installation

```
cloudforge version
# CloudForge CLI v2.15.0
```

Authentication

Login

```
# Interactive login (opens browser)
cloudforge login

# Login with API key
cloudforge login --api-key YOUR_API_KEY

# Login with environment variable
export CLOUDFORGE_API_KEY=your_api_key
cloudforge login
```

Check Authentication

```
cloudforge whoami  
# User: jane@novatech.com  
# Organization: novatech  
# Workspace: production
```

Logout

```
cloudforge logout
```

Configuration

Set Default Workspace

```
cloudforge config set workspace production
```

View Configuration

```
cloudforge config list  
# workspace: production  
# region: us-west-2  
# output: table
```

Configuration File

Located at `~/.cloudforge/config.yaml`:

```
workspace: production  
region: us-west-2  
output: table  
api_endpoint: https://api.cloudforge.novatech.com
```

Environment Commands

List Environments

```
cloudforge env list
```

```
# Output:  
# NAME      STATUS    REGION      CREATED  
# production running  us-west-2  2024-01-15  
# staging   running  us-west-2  2024-01-15  
# development stopped  us-west-2  2024-02-01
```

Create Environment

```
# From configuration file  
cloudforge env create -f environment.yaml  
  
# Quick create  
cloudforge env create myenv --template web-app
```

Get Environment Details

```
cloudforge env get production  
  
# Detailed output  
cloudforge env get production --output yaml
```

Update Environment

```
cloudforge env apply -f environment.yaml  
  
# Preview changes  
cloudforge env plan -f environment.yaml
```

Delete Environment

```
cloudforge env delete myenv  
  
# Skip confirmation  
cloudforge env delete myenv --yes
```

Environment Logs

```
# Stream logs
cloudforge env logs production

# Historical logs
cloudforge env logs production --since 1h

# Filter by service
cloudforge env logs production --service api
```

Service Commands

List Services

```
cloudforge service list --env production
```

Deploy Service

```
# Deploy with image
cloudforge service deploy api \
--env production \
--image myapp:v1.2.3

# Deploy with config
cloudforge service deploy -f service.yaml
```

Scale Service

```
cloudforge service scale api \
--env production \
--replicas 5
```

Restart Service

```
cloudforge service restart api --env production
```

Service Status

```
cloudforge service status api --env production
```

Kubernetes Commands

Get Kubeconfig

```
cloudforge k8s kubeconfig --cluster production-cluster
```

List Clusters

```
cloudforge k8s list
```

Create Cluster

```
cloudforge k8s create \
--name my-cluster \
--region us-west-2 \
--version 1.29 \
--node-count 3
```

Upgrade Cluster

```
cloudforge k8s upgrade \
--cluster my-cluster \
--version 1.29
```

Node Pool Management

```
# Add node pool
cloudforge k8s nodepool add \
--cluster my-cluster \
--name gpu-pool \
--instance-type p4d.24xlarge \
--min-size 0 \
--max-size 4

# Scale node pool
cloudforge k8s nodepool scale \
```

```
--cluster my-cluster \
--name general \
--min-size 3 \
--max-size 10
```

Database Commands

List Databases

```
cloudforge db list --env production
```

Create Database

```
cloudforge db create mydb \
--env production \
--engine postgres \
--version 15 \
--instance-class db.r6g.large
```

Connection String

```
cloudforge db connect-info mydb --env production

# Output:
# Host: mydb.abc123.us-west-2.rds.amazonaws.com
# Port: 5432
# Database: mydb
# Username: admin
```

Backup Database

```
cloudforge db backup create mydb --env production
```

Restore Database

```
cloudforge db restore mydb \
--env production \
--backup-id backup-20240720
```

Networking Commands

List Load Balancers

```
cloudforge network lb list --env production
```

DNS Management

```
# List DNS records
cloudforge network dns list --zone example.com

# Create record
cloudforge network dns create \
--zone example.com \
--name api \
--type A \
--value 1.2.3.4
```

VPC Information

```
cloudforge network vpc get --env production
```

Secrets Commands

List Secrets

```
cloudforge secret list --env production
```

Create Secret

```
# From value
cloudforge secret set API_KEY myvalue --env production

# From file
cloudforge secret set CERT --from-file cert.pem --env production
```

Get Secret

```
cloudforge secret get API_KEY --env production
```

Delete Secret

```
cloudforge secret delete API_KEY --env production
```

Cost Commands

View Current Costs

```
cloudforge cost current
```

```
# Output:  
# Current Month: $45,234 (72% of budget)  
# Projected: $62,845
```

Cost Breakdown

```
cloudforge cost breakdown --period month  
  
# By service  
cloudforge cost breakdown --group-by service  
  
# By environment  
cloudforge cost breakdown --group-by environment
```

Cost Alerts

```
cloudforge cost alert create \  
--name monthly-limit \  
--threshold 50000 \  
--email team@novatech.com
```

Monitoring Commands

View Metrics

```
cloudforge metrics get cpu \  
--env production \  
--service api \  
--period 1h
```

List Alerts

```
cloudforge alert list --env production
```

Create Alert

```
cloudforge alert create \
  --name high-cpu \
  --env production \
  --metric cpu \
  --threshold 80 \
  --duration 5m
```

Deployment Commands

Deploy

```
# Deploy environment
cloudforge deploy --env production

# Deploy specific service
cloudforge deploy --env production --service api

# Deploy with approval
cloudforge deploy --env production --require-approval
```

Rollback

```
# Rollback to previous version
cloudforge rollback --env production

# Rollback to specific version
cloudforge rollback --env production --version v1.2.2
```

Deployment History

```
cloudforge deploy history --env production
```

Output Formats

Table (Default)

```
cloudforge env list --output table
```

JSON

```
cloudforge env list --output json
```

YAML

```
cloudforge env list --output yaml
```

Quiet (IDs only)

```
cloudforge env list --output quiet
```

Global Flags

Flag	Description
--workspace, -w	Specify workspace
--env, -e	Specify environment
--output, -o	Output format (table, json, yaml)
--verbose, -v	Verbose output
--debug	Debug mode
--yes, -y	Skip confirmations
--help, -h	Show help

Environment Variables

Variable	Description
CLOUDFORGE_API_KEY	API key for authentication
CLOUDFORGE_WORKSPACE	Default workspace

Variable	Description
CLOUDFORGE_REGION	Default region
CLOUDFORGE_OUTPUT	Default output format
CLOUDFORGE_DEBUG	Enable debug mode

Shell Completion

Bash

```
cloudforge completion bash > /etc/bash_completion.d/cloudforge
```

Zsh

```
cloudforge completion zsh > "${fpath[1]}/_cloudforge"
```

Fish

```
cloudforge completion fish > ~/.config/fish/completions/cloudforge.fish
```

Examples

Create Complete Environment

```
# Create from template
cloudforge env create production \
  --template microservices \
  --region us-west-2 \
  --wait

# Apply configuration
cloudforge env apply -f production.yaml

# Deploy services
cloudforge deploy --env production
```

Migrate Database

```
# Create backup
cloudforge db backup create mydb --env production --wait

# Restore to new environment
cloudforge db restore mydb \
  --env staging \
  --backup-id backup-20240720
```

Debug Failing Service

```
# Check service status
cloudforge service status api --env production

# View recent logs
cloudforge env logs production --service api --since 15m

# Get shell access
cloudforge service exec api --env production -- /bin/sh
```

Related Documents: Getting Started (PRD-CF-001), API Reference (PRD-CF-055), Configuration Guide (PRD-CF-010)