CloudForge Getting Started Guide

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Welcome to CloudForge

CloudForge is NovaTech's cloud infrastructure platform that simplifies deploying, managing, and scaling your applications across multiple cloud providers. This guide will help you get started quickly.

Quick Start Checklist

- ☐ Create your NovaTech account
- ☐ Set up your organization
- ☐ Connect your cloud provider(s)
- ☐ Deploy your first environment
- ☐ Invite team members

Step 1: Create Your Account

Sign Up

1. Visit cloudforge.novatech.com
2. Click **Get Started Free**
3. Enter your email and create a password
4. Verify your email address
5. Complete your profile

Account Requirements

- Valid email address
- Password: 12+ characters, uppercase, lowercase, number, symbol
- Two-factor authentication (required for all accounts)

Step 2: Set Up Your Organization

Create Organization

1. After login, click **Create Organization**
2. Enter organization name (e.g., "Acme Corp")
3. Choose your plan:
   - **Starter** (Free): Up to 3 users, 2 environments
   - **Professional** ($499/mo): Up to 25 users, unlimited environments
   - **Enterprise** (Custom): Unlimited users, advanced features
4. Add billing information (skip for Starter)
5. Click **Create**

Organization Settings

Configure key settings: - **Timezone:** Your team's primary timezone - **Default Region:** Preferred cloud region - **Notifications:** Email and Slack preferences

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Step 3: Connect Cloud Providers

CloudForge supports AWS, Google Cloud, and Azure. Connect at least one provider to start deploying.

AWS Connection

Option 1: IAM Role (Recommended)

1. Go to **Settings → Cloud Providers**
2. Click **Add Provider → AWS**
3. Select **IAM Role** authentication
4. CloudForge generates a CloudFormation template
5. Deploy the template in your AWS account
6. Copy the Role ARN back to CloudForge
7. Test connection

Required Permissions:

```
{
  "Version": "2012-10-17",
```

```
  "Statement": [
    {
      "Effect": "Allow",
      "Action": [
        "ec2:*",
        "ecs:*",
        "rds:*",
        "s3:*",
        "iam:PassRole",
        "cloudformation:*"
      ],
      "Resource": "*"
    }
  ]
}
```

Option 2: Access Keys

1. Create IAM user with programmatic access
2. Attach required permissions
3. Enter Access Key ID and Secret in CloudForge
4. Test connection

> **Security Note:** IAM roles are preferred. If using access keys, rotate them every 90 days.

Google Cloud Connection

1. Go to **Settings → Cloud Providers**
2. Click **Add Provider → Google Cloud**
3. Create a service account in GCP
4. Grant required roles:
   - Compute Admin
   - Storage Admin
   - Cloud SQL Admin
5. Download JSON key
6. Upload to CloudForge
7. Test connection

Azure Connection

1. Go to **Settings → Cloud Providers**
2. Click **Add Provider → Azure**

3. Register CloudForge app in Azure AD
4. Grant required permissions
5. Enter Tenant ID, Client ID, Client Secret
6. Test connection

Step 4: Deploy Your First Environment

Create Environment

1. Click **Environments → New Environment**
2. Enter environment details:
    - **Name:** e.g., "production", "staging"
    - **Type:** Production, Staging, Development
    - **Region:** Select cloud region
    - **Provider:** Choose connected provider

Add Resources

Quick Start: Web Application Stack

1. From the environment, click **Add Resource**
2. Select **Web App Template**
3. Configure:
    - **Instance Type:** t3.medium (recommended for start)
    - **Instances:** 2 (for high availability)
    - **Load Balancer:** Yes
    - **Database:** PostgreSQL (optional)
4. Review estimated costs
5. Click **Deploy**

Monitor Deployment

- View real-time deployment progress
- Check logs for any issues
- Receive notification when complete
- Typical deployment: 5-10 minutes

Step 5: Invite Team Members

Add Users

1. Go to **Settings → Team**
2. Click **Invite Member**
3. Enter email address
4. Assign role:
   - **Viewer:** Read-only access
   - **Developer:** Deploy to non-production
   - **Admin:** Full access
   - **Owner:** Organization owner
5. Click **Send Invite**

Role Permissions

Permission	Viewer	Developer	Admin	Owner
View environments				
View logs				
Deploy to dev/staging	-			
Deploy to production	-	-		
Manage team	-	-		
Billing & settings	-	-	-	

Core Concepts

Environments

Environments are isolated deployment targets (e.g., production, staging, dev). Each environment has its own: - Resources (compute, storage, databases) - Configuration - Access controls - Monitoring

Resources

Resources are cloud infrastructure components: - **Compute:** VMs, containers, serverless functions - **Storage:** Object storage, block storage - **Databases:** PostgreSQL, MySQL, MongoDB - **Networking:** VPCs, load balancers, DNS

Templates

Templates are reusable infrastructure definitions: - Pre-built templates for common stacks - Custom templates for your architecture - Version controlled - Shareable across teams

Pipelines

Pipelines automate deployments: - Triggered by Git commits - Run tests before deployment - Approval workflows - Rollback capability

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Next Steps

Explore Features

1. **Infrastructure as Code:** Define infrastructure with YAML
2. **Multi-Region:** Deploy across regions for redundancy
3. **Auto-Scaling:** Automatically adjust resources
4. **Cost Optimization:** Get recommendations to reduce spend

Integrate with Your Tools

- **Git:** Connect GitHub, GitLab, Bitbucket
- **CI/CD:** Integrate with DevPipeline or other CI tools
- **Monitoring:** Built-in or connect Datadog, New Relic
- **Secrets:** Integrate with SecureVault

Learn More

- API Reference
- CLI Guide
- Best Practices
- Video Tutorials

Common First Steps

Import Existing Infrastructure

Already have infrastructure? Import it:

```
cloudforge import --provider aws --region us-west-2
```

CloudForge scans your account and creates matching definitions.

Set Up CI/CD

1. Connect your Git repository
2. Create a pipeline configuration:

```yaml
# .cloudforge/pipeline.yaml
name: deploy
trigger:
  branches: [main]

stages:
  - name: deploy-staging
    environment: staging
    auto: true

  - name: deploy-production
    environment: production
    approval: required
```

3. Push to trigger deployment

Enable Monitoring

1. Go to **Environment → Monitoring**
2. Enable built-in monitoring (free)
3. Configure alerts:
   - CPU > 80%
   - Memory > 90%
   - Error rate > 1%
4. Set notification channels (email, Slack)

Getting Help

Resources

- **Documentation:** docs.cloudforge.novatech.com
- **Community:** community.novatech.com
- **Support Portal:** support.novatech.com

Support Channels

Plan	Support Level
Starter	Community, docs
Professional	Email support (24hr response)
Enterprise	Priority support (1hr response), dedicated CSM

Contact Support

- **Email:** support@novatech.com
- **In-app:** Click **Help → Contact Support**
- **Phone:** Enterprise only

Troubleshooting

Connection Issues

"Unable to connect to AWS" - Verify IAM role/credentials have required permissions - Check region is correct - Ensure no IP restrictions block CloudForge

"Deployment failed" - Check resource logs for errors - Verify cloud provider quotas - Review configuration for typos

Common Questions

Q: How long do deployments take? A: Typically 5-10 minutes for standard deployments. Large infrastructures may take longer.

Q: Can I use my existing Terraform? A: Yes! CloudForge can import Terraform configurations. See our migration guide.

Q: What happens if I exceed my plan limits? A: You'll receive a notification. Upgrade to continue adding resources.

Related Documents: API Reference (PRD-CF-010), Architecture Overview (PRD-CF-002), Pricing Plans (PRD-CF-015)