

API Key Configuration

Configure AI providers for Scale's intelligent features.

Supported Providers

OpenAI

- **Models**: GPT-4, GPT-3.5-turbo
- **Best for**: General coding, chat, documentation
- **Setup**: [Get API key] (<https://platform.openai.com/api-keys>)

Anthropic Claude

- **Models**: Claude-3, Claude-2
- **Best for**: Code analysis, complex reasoning
- **Setup**: [Get API key] (<https://console.anthropic.com/>)

Google AI

- **Models**: Gemini Pro, Gemini Ultra
- **Best for**: Multimodal tasks, code generation
- **Setup**: [Get API key] (<https://makersuite.google.com/app/apikey>)

Configuration Steps

1. Open Scale Settings

- Command Palette: Ctrl+Shift+P
- Type: "Scale: Settings"
- Click on the settings option

2. Enter API Key

- Paste your API key in the designated field
- Select your provider from dropdown
- Choose your preferred model

3. Test Connection

- Click "Test Connection" button
- Verify successful connection
- Check response quality

Security Best Practices

API Key Security

- Never commit API keys to version control

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- Use environment variables for team setups
- Rotate keys regularly
- Monitor usage and costs

### Enterprise Security
- Use RBAC to control API access
- Enable audit logging for compliance
- Set usage limits per user/team
- Regular security reviews

## Usage Optimization

### Cost Management
- Monitor token usage in analytics
- Use appropriate models for tasks
- Implement caching for repeated queries
- Set usage alerts

### Performance Tuning
- Choose models based on task complexity
- Optimize context window usage
- Use streaming for long responses
- Cache frequent responses

## Troubleshooting

### Common Issues
- **Invalid API Key**: Double-check key format and permissions
- **Rate Limits**: Implement retry logic or upgrade plan
- **Network Issues**: Check firewall and proxy settings
- **Model Unavailable**: Verify model access in provider console

### Error Messages
- `401 Unauthorized`: Invalid or expired API key
- `429 Too Many Requests`: Rate limit exceeded
- `500 Server Error`: Provider service issue
- `Network Error`: Connection or firewall issue
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