CMS v2

This is the operational manual for the CloudAxis CMS.

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- Catalogue, Pricing, and Calculator
- Usage, Billing, and Invoicing
- Quotas
- Alerts, Jobs, and Updates
- Settings and Operations

CMS v2 Usage Manual

CMS v2 Usage Manual

Overview

CMS v2 is the CloudAxis portal for managing cloud customers, platform regions, subscriptions, catalogue pricing, usage, billing, invoices, alerts, jobs, settings, and updates.

This manual is for administrators, operators, support teams, and users who need to understand what the portal does and how to use it.

Purpose

Use CMS to:

- Manage distributors, partners, tenants, users, and subscriptions.
- Configure Azure Stack, Azure Local, Public Azure, and CloudStack regions.
- Maintain catalogue and pricing data.
- Collect usage and review billing.
- Generate and review invoices.
- Track alerts, scheduled jobs, backups, and updates.
- Control platform settings, branding, notifications, and access.

Navigation

The left navigation changes by role. Users see only the pages and records available to their assigned organisation access.

Area	Use it for
Dashboard	Review scoped KPIs, health, consumption, invoices, and projections.
Billing	Review charges, invoices, billing status, and commissions.
Documents	View and accept documents or terms.

Area	Use it for
Regions	Configure platform regions and region operations.
Relationships	Manage distributors, partners, and tenants.
Notifications	Review alerts and messages.
Pricing	Manage currencies, price lists, and platform catalogue pricing.
Subscriptions	Create and manage subscriptions, quotas, and resource views.
Catalogue	Review platform catalogue items.
Users	Create users, assign roles, and manage authentication actions.
Settings	Manage platform settings, themes, backups, notifications, jobs, and updates.

User Roles

Role family	Typical access
PlatformAdministrator	Full platform administration.
PlatformReader	Platform-level read-only access.
PlatformService	Automation access for platform service tasks.
DistributorAdministrator	Distributor-scoped management of partners, tenants, users, subscriptions, and reports.
DistributorUser	Distributor-scoped read access where enabled.
PartnerAdministrator	Partner-scoped management of tenants, users, subscriptions, and reports.
PartnerUser	Partner-scoped read access where enabled.
TenantAdministrator	Tenant-scoped management of users, subscriptions, documents, and reports.
TenantUser	Tenant-scoped read access and document acceptance.

Access

Access depends on the user's role and organisation relationship. If a page, record, button, report, or action is missing, check:

1. The user's role.
2. The user's tenant, partner, distributor, or platform relationship.
3. Whether the relevant feature is enabled in Settings.
4. Whether prerequisite records exist.

Common Setup Dependencies

If this is missing	Check this first
Pricing, subscriptions, quotas, or usage	At least one enabled region exists.
Partners	A distributor exists.
Tenants	A partner exists.
Billing and invoice data	Usage collection and billing generation have run for the period.
Resource group billing	Azure or Azure Local resource groups are tagged to the CMS subscription.

Related Pages

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Authentication and Users

Overview

Authentication and user management control how people sign in, activate accounts, register MFA, choose a timezone, and receive role-based access to CMS.

Sign-In Options

CMS can show one or more sign-in options depending on platform settings:

- CMS username and password.
- Microsoft Entra sign-in.
- Google sign-in.

If an expected sign-in option is missing, a platform administrator should check the Authentication and Portal settings for enabled providers and configured provider details.

Account Activation

Some environments require users to activate their account before normal portal access.

Common activation actions are:

Action	What happens
Send welcome email	Sends the user an activation link when email delivery is configured.
Reset activation	Generates a fresh activation code for an unconfirmed user.
Request a new activation code	Allows a user who can sign in but is not activated to request a new code.
Activate account	Confirms the activation code and allows the user to continue.

MFA

When MFA is required, users are prompted to register MFA during sign-in. If a user loses access to their authenticator, an authorised administrator can reset MFA for that user.

After MFA is reset, the user registers MFA again the next time they sign in.

User Management

The Users page is available to administrators with the required organisation access.

The user editor includes:

- User properties.
- Scope and permissions.
- Authentication settings.
- Authentication information.
- Activation actions.
- MFA reset.
- Password reset.
- Timezone selection.

Role Assignment

Administrators can assign roles only inside their own permitted scope.

Acting role	Typical assignment boundary
Platform administrator	Platform, distributor, partner, and tenant roles.
Distributor administrator	Distributor, partner, and tenant roles in distributor scope.
Partner administrator	Partner and tenant roles in partner scope.
Tenant administrator	Tenant roles in tenant scope.

If a role is not available in the selector, confirm that the acting user has permission to assign that role and that the target user belongs to the correct organisation scope.

Timezone Preference

Users can set their own display timezone. If a user does not choose a timezone, CMS uses the system timezone setting. Operational records remain consistent while portal timestamps are shown in the user's effective timezone.

Email Templates

Administration > Notifications includes templates for account activation, welcome emails, invoices, delinquent payment reminders, budget alerts, and other notification types.

Access

Users only see user records and actions allowed by their role and organisation access. If a user cannot see the Users page, a user row, or an action such as password reset or MFA reset, confirm the acting user has the correct administrator role and relationship to the target user.

Relationships

Relationships

Overview

Relationships define the commercial and support hierarchy used by CMS. They connect distributors, partners, tenants, users, subscriptions, billing, commissions, documents, and dashboards.

Purpose

Use Relationships to create and manage the organisations that own or support tenants and subscriptions.

Relationship Hierarchy

```
Distributor
  -> Partner
       -> Tenant
            -> Subscription
```

User Roles

Role family	Typical relationship access
Platform roles	All distributors, partners, and tenants.
Distributor roles	Their distributor, partners, and tenants.
Partner roles	Their partner and tenants.
Tenant roles	Their tenant.

Key Workflows

Create a Distributor

1. Open Relationships.
2. Select the distributor area.
3. Choose New Distributor.
4. Enter display name, description, billing contact, billing address, country, and currency.
5. Review the summary and create the distributor.

Create a Partner

1. Open Relationships.
2. Select the partner area.
3. Choose New Partner.
4. Select the distributor.
5. Enter partner details, billing details, and contact information.
6. Review the summary and create the partner.

Create a Tenant

1. Open Relationships.
2. Select the tenant area.
3. Choose New Tenant.
4. Enter tenant details and billing details.
5. Review the summary and create the tenant.

Configuration

Self-provisioning settings can allow or restrict delegated creation actions. Platform administrators can create relationship records directly. Read-only users can view records but cannot create or change them.

What To Check

If a user cannot create or edit a relationship record, check:

1. The user's role.

2. The user's distributor, partner, or tenant relationship.
3. Whether the required parent record exists.
4. Whether self-provisioning settings allow the action.

Related Pages

- Authentication and Users
- Subscriptions and Resource Groups
- Usage, Billing, and Invoicing
- Settings and Operations

Regions and Platforms

Regions and Platforms

Overview

Regions define where subscriptions can be created, where usage can be collected, and which platform integration CMS uses.

Purpose

Use Regions to configure the platform locations CMS manages or bills, test readiness, control tenant access, review health, and run region operations.

Supported Platforms

Platform	What users should expect
Azure Stack	Subscriptions, usage collection, health, catalogue, quotas, and lifecycle actions.
Azure Local	Azure Local VM and disk usage, image catalogue, resource groups, and billing through CMS pricing.
Public Azure	Azure cost import, resource group tag mapping, fallback subscription handling, and pass-through uplift.
CloudStack	CloudStack subscriptions, offers, templates, usage, billing, and quota-style limits.

User Roles

Regions are primarily managed by platform administrators. Platform readers can review platform information where permitted. Non-platform users see region-related information only where it is needed for dashboards, subscriptions, calculator options, or billing visibility.

Key Workflows

Prepare a Region

1. Open Regions.
2. Create or edit a region.
3. Select the platform.
4. Enter required platform configuration.
5. Save the region.
6. Run the available connection or health checks.
7. Confirm the region is enabled and ready before creating subscriptions.

Restrict Tenant Access

1. Open the region details.
2. Select Tenant Access.
3. Add allowed tenants when the region should be restricted.
4. Leave the list empty when all role-visible tenants may use the region.

Run Region Operations

Use region details to run available platform actions such as health refresh, usage update, or region-specific maintenance. Actions appear only when the region is configured enough for the selected platform.

Configuration Notes

Platform	Important configuration
Azure Stack	Provider connection, identity registration mode, certificate storage, catalogue, quotas, and health.
Azure Local	Azure connection, region location, cluster details, image sync, resource group tagging, and usage collection.
Public Azure	Azure connection, resource group tag key, currency, fallback subscription, and pass-through pricing.
CloudStack	CloudStack endpoint, zone/account configuration, offers, templates, and domain/account mapping.

What To Check

If a region or action is missing, check:

1. The user's role.
2. Whether the region is enabled.
3. Whether required platform configuration is complete.
4. Whether the tenant is allowed to use the region.
5. Whether the action applies to the selected platform.

Related Pages

- Subscriptions and Resource Groups
- Catalogue, Pricing, and Calculator
- Usage, Billing, and Invoicing
- Quotas

Subscriptions and Resource Groups

Subscriptions and Resource Groups

Overview

Subscriptions connect tenants to platform regions. They are the main boundary for usage, billing, invoices, quotas, resource groups, and dashboard summaries.

Purpose

Use Subscriptions to create cloud subscription records, review lifecycle state, run available platform actions, manage quotas, and prepare Azure or Azure Local resource groups for billing.

User Roles

Role family	Typical subscription access
Platform administrator	Create and manage subscriptions across the platform.
Platform reader	View subscription information.
Distributor administrator	Manage subscriptions inside distributor scope where enabled.
Partner administrator	Manage subscriptions inside partner scope where enabled.
Tenant administrator	Manage tenant subscriptions where enabled.
Read-only users	View scoped subscription data.

Key Workflows

Create a Subscription

1. Open Subscriptions.
2. Choose New Subscription.
3. Select the tenant.
4. Select the platform and region.
5. Complete any platform-specific fields.
6. Accept required terms when prompted.
7. Review and create the subscription.

Before creating a subscription, confirm the tenant exists, the region is enabled and ready, and the tenant is allowed to use the region.

Manage Subscription Lifecycle

Open a subscription details page to use available actions such as repair, enable, disable, delete, update usage, or platform-specific operations. The available actions depend on role, platform, subscription state, and self-provisioning settings.

Use Resource Groups

Azure and Azure Local subscriptions include a Resource Groups tab. Use it to create resource groups that are automatically tagged to the CMS subscription.

Default mapping tag:

```
CmsSubscriptionId = <CMS Subscription Id>
```

The region may use a different configured tag key.

Configuration

Self-provisioning settings can restrict delegated subscription creation and lifecycle actions. Public Azure subscriptions are billing mappings, so Azure Stack and CloudStack lifecycle actions do not apply to them.

What To Check

If an action or record is missing, check:

1. The user's role and organisation scope.
2. Whether subscription self-provisioning is enabled for the user's role family.
3. Whether the region is enabled and ready.
4. Whether the tenant is allowed to use the region.
5. Whether the action applies to the subscription platform and state.
6. Whether resource groups carry the correct CMS subscription tag.

Related Pages

- Regions and Platforms
- Catalogue, Pricing, and Calculator
- Usage, Billing, and Invoicing
- Quotas

Catalogue, Pricing, and Calculator

Catalogue, Pricing, and Calculator

Overview

Catalogue and pricing records define what CMS can bill and estimate. Pricing can be set for a region or a tenant. Tenant pricing is used before region pricing when both are available.

Purpose

Use Catalogue and Pricing to maintain billable items, rate cards, currency information, pricing thresholds, and calculator inputs.

Supported Catalogue Areas

Platform	Catalogue items
Azure Stack	Meters and SKUs.
Azure Local	Meters and images.
Public Azure	Resource categories and pass-through pricing.
CloudStack	Offers and templates.

Catalogue tabs appear only when at least one region exists for the platform.

User Roles

Pricing management requires platform administrator access. Platform readers can review pricing where permitted. Calculator access is broader, but users only see tenants, regions, platforms, and pricing available to their role and organisation scope.

Key Workflows

Maintain Pricing

1. Open Pricing.
2. Select the platform and scope.
3. Review region or tenant pricing.
4. Create, edit, clone, adjust, import, or export pricing where permitted.
5. Save changes.
6. Recalculate or regenerate related billing where operationally required.

Import Pricing

1. Export the current pricing CSV.
2. Edit supported pricing values.
3. Import the CSV.
4. Run validation first.
5. Apply the import only after reviewing validation results.

CSV import updates matching existing pricing rows. It does not create missing rows.

Use the Calculator

1. Open the calculator.
2. Select the tenant where available.
3. Select the region and platform.
4. Add catalogue items or expected cost inputs.
5. Review the estimated monthly total.

If no pricing exists for the selected scope, the portal shows a no-pricing message.

Configuration Notes

Platform	Pricing model
Azure Stack	Meter and SKU pricing.

Platform	Pricing model
Azure Local	Meter and image pricing.
Public Azure	Pass-through percentage uplift.
CloudStack	Offer and template pricing.

Public Azure pass-through pricing starts with Azure source cost, applies CMS currency conversion where needed, then applies the configured uplift percentage.

Known Limitations

CSV import is update-only. Create any missing pricing rows in CMS before importing changes.

What To Check

If pricing or calculator options are missing, check:

1. A region exists for the platform.
2. Catalogue items exist for the selected platform and region.
3. Pricing exists for the selected region or tenant.
4. The user has access to the selected tenant and region.
5. Region tenant access allows the selected tenant to use the selected region.

Related Pages

- Regions and Platforms
- Usage, Billing, and Invoicing
- Quotas

Usage, Billing, and Invoicing

Overview

CMS collects or imports platform usage, converts it into billing rows, displays billing reports, creates invoices, and calculates commissions.

Purpose

Use Billing to review charges, compare periods, inspect billing details, export billing rows, generate invoices, review billing status, and check commission information.

User Roles

Role family	Typical billing access
Platform administrator	Generate billing, generate invoices, review all billing, and manage billing settings.
Platform reader	Review platform billing where permitted.
Distributor and partner roles	Review scoped billing, invoices, and commissions where visibility settings allow it.
Tenant roles	Review tenant billing and invoices where visibility settings allow it.

Usage Collection

Platform	What happens
Azure Stack	CMS collects platform usage and prices it through CMS pricing.
Azure Local	CMS collects VM and disk allocation usage and prices it through CMS pricing.
Public Azure	CMS imports Azure cost data, maps it to subscriptions, and applies configured uplift.
CloudStack	CMS collects CloudStack usage and prices it through CMS pricing.

Usage can be collected by scheduled jobs or by manual region actions where available.

Key Workflows

Review Billing

1. Open Billing.
2. Choose daily or monthly view.
3. Select the date range or month.
4. Filter by region, tenant, or subscription.
5. Open a row to inspect billing details.
6. Export CSV when needed.

Generate Invoices

1. Confirm usage collection has run.
2. Confirm pricing exists for the period.
3. Confirm billing generation has run.
4. Open the invoice generation action.
5. Select monthly or quarterly invoice mode where available.
6. Review generated invoices.

Review Billing Status

Use Billing Status to compare overdue, issued, uninvoiced, and paid totals by tenant and subscription.

Invoice Cadence

Invoice type	Behaviour
Monthly	Uses actual consumption for the selected coverage month.
Quarterly	Uses a projected future quarter based on recent completed months and true-up information where available.

Invoice visibility settings control whether tenant, partner, and distributor users can see invoice tabs and widgets.

Commissions

Commission summaries and charts are available to users with partner, distributor, or platform access. Users only see commission information inside their permitted organisation scope.

What To Check

If expected billing or invoice data is missing, check:

1. A region exists and is enabled.
2. Subscriptions exist for the tenant.
3. Usage collection has run for the period.
4. Pricing exists for the platform, region, tenant, and catalogue item.
5. Billing generation has run for the period.
6. Invoice visibility settings allow the user's role family to see invoices.

Known Limitations

Historical Public Azure billing regeneration should be planned carefully by period and region before running operational backfill or recollection work.

Quotas

Overview

Quota management lets operators view and manage tenant resource limits for supported platforms. The main quota workspace is the Quotas tab on the Subscriptions page.

Purpose

Use Quotas to review current tenant resource limits, request changes, approve changes, and track quota history for supported platforms.

Supported Platforms

Platform	Quota behaviour
Azure Stack	Shows tenant quota values for Azure Stack quota groups.
CloudStack	Shows tenant resource limits for CloudStack domains and accounts.

Azure Local and Public Azure quotas are not managed from the current quota workspace.

User Roles

Role	Can view	Can request changes	Can approve or apply
TenantUser	Yes	No	No
TenantAdministrator	Own tenant	Yes	No
PartnerAdministrator	Partner tenants	Yes	No
DistributorAdministrator	Distributor hierarchy	Yes	No
PlatformAdministrator	All quotas	Yes	Yes

Key Workflows

Review Quotas

1. Open Subscriptions.
2. Select the Quotas tab.
3. Select tenant, platform, and region.
4. Review current values, requested values, status, and history.

Request a Change

1. Open the relevant quota scope.
2. Enter the requested value.
3. Save or submit the request.
4. Wait for platform administrator review where approval is required.

Approve or Apply a Change

1. Open the pending quota scope.
2. Review requested values and history.
3. Approve, reject, or apply according to the operational process.

Configuration

Platform > Quotas settings control whether tenant, partner, and distributor role families can see quota management. Platform administrators are not restricted by these visibility settings.

What To Check

If quota values do not appear:

1. Confirm a supported platform region exists.
2. Confirm the tenant has subscriptions in that platform and region.
3. Confirm quota visibility settings allow the user's role family.
4. Confirm the selected tenant, platform, and region combination is valid.

Related Pages

- Regions and Platforms
- Subscriptions and Resource Groups
- Catalogue, Pricing, and Calculator

Alerts, Jobs, and Updates

Overview

Alerts, scheduled jobs, and updates help platform operators detect issues, run recurring work, and keep CMS services current.

Purpose

Use these operation pages to monitor alerts, review scheduled work, manually run supported jobs, inspect update readiness, and install CMS application updates.

Alerts

Alerts appear in the notification area and Alerts page. They help users identify issues that need attention, such as missing usage, missing subscriptions, region health, identity health, missing billing information, cost issues, or license validity.

Alert information	Meaning
Title	Short issue summary.
Message	Expected operator action or context.
Area	Feature or platform area.
Type or severity	Importance of the issue.
Related record	Tenant, subscription, region, platform, or other item connected to the alert.
Status	Whether the alert is open, closed, or in another workflow state.

Alert Visibility

Role	Typical visibility
PlatformAdministrator	Platform alerts and all scoped alerts.

Role	Typical visibility
DistributorAdministrator	Distributor, partner, tenant, and subscription alerts inside distributor scope.
PartnerAdministrator	Partner, tenant, and subscription alerts inside partner scope.
TenantAdministrator	Tenant and subscription alerts inside tenant scope.
TenantUser	Tenant-level alerts where enabled.

Scheduled Jobs

Administration > Jobs shows scheduled jobs and recent run history for platform roles.

Job type	Purpose
Database backup	Runs configured CMS database backup tiers.
Usage collection	Collects usage and prepares billing-related data.
Usage data cleanup	Removes expired usage data when cleanup settings allow it.
Region health	Refreshes region and identity health.
Delinquent payment notifications	Sends overdue invoice reminders when enabled.
Budget alerts	Sends budget warning or breach notifications when enabled.
License validity	Raises or clears license validity alerts.

Key Workflows

Review Alerts

1. Open Notifications or the alert indicator.
2. Filter or search for the alert.
3. Open the related record where available.
4. Complete the required operational action.
5. Close the alert if the process allows it.

Run a Scheduled Job

1. Open Administration > Jobs.

2. Select Scheduled Jobs.
3. Review the job status and next run.
4. Choose Run Now where the action is available.
5. Review Run History after the job completes.

Install an Update

1. Open Administration > Updates.
2. Review the available version and release notes.
3. Check service health and backup warnings.
4. Start the install action.
5. Monitor progress and service health.

Access

Alerts are visible according to organisation scope. Jobs and Updates are platform operations areas. Manual job runs and update installs require platform administrator access.

Settings and Operations

Overview

Settings and Operations pages let platform administrators manage runtime configuration, themes, notification delivery, backups, jobs, updates, documents, and selected feature flags.

Purpose

Use Settings and Operations to configure how CMS behaves without changing application files, and to manage operational workflows such as backups, notifications, update settings, and branding.

Settings Categories

Category	Typical contents
Authentication	Sign-in, activation, MFA, and federated login settings.
Backup	Backup provider, tooling, storage, and retention settings.
Billing	Invoice settings, invoice visibility, billing mode, and usage selection.
Notifications	Email provider, delivery settings, budget alerts, and notification templates.
Platform	Defaults, self-provisioning, region retention, quotas, timezone, and platform options.
Portal	Portal title, theme, login options, and display configuration.
Updates	Update enablement, channel, Patch Manager connection, and update settings.

User Roles

Settings and operational administration are platform areas. Platform administrators can change settings and run operational actions. Platform readers can review information where permitted.

Key Workflows

Update a Setting

1. Open Settings.
2. Select the relevant category tab.
3. Search or browse to the setting.
4. Change the value.
5. Save changes.
6. Follow any operational note, such as rerunning a job or refreshing a page.

Manage Notification Templates

1. Open Administration > Notifications.
2. Select Templates.
3. Open a template.
4. Review subject, description, enabled state, and body content.
5. Save changes.
6. Send a test message where available.

Manage Backups

1. Open Backups.
2. Review existing backup files.
3. Run a manual backup when needed.
4. Test storage settings before relying on a backup target.
5. Restore only after confirming the target backup and operational approval.

Manage Themes

1. Open Settings > Themes.
2. Create or edit a theme.
3. Add logos, wallpaper, font information, colors, and theme options.
4. Validate and save.
5. Set the theme as default when ready.

Sensitive Settings

Sensitive settings such as passwords, connection strings, and API keys are masked in the portal. When a masked value is left unchanged, CMS keeps the existing value.

Only replace sensitive settings when the new value is known and approved for the environment.

Documents and Terms

Documents and terms can require user or tenant acceptance before users continue normal portal work. New subscription terms can appear during subscription creation when enabled.

What To Check

If a setting or operational action is missing, check:

1. The user's platform role.
2. Whether the environment has been prepared for that feature.
3. Whether required sensitive settings are configured.
4. Whether the relevant feature is enabled.

Related Pages

- Authentication and Users
- Alerts, Jobs, and Updates
- Usage, Billing, and Invoicing