McMillan Enterprise Edition - Complete API Endpoints

1. Authentication & Authorization

User Authentication

- `POST /api/v1/auth/register` - User registration
- `POST /api/v1/auth/login` - User login
- `POST /api/v1/auth/logout` - User logout
- `POST /api/v1/auth/refresh` - Refresh access token
- `POST /api/v1/auth/forgot-password` - Forgot password request
- `POST /api/v1/auth/reset-password` - Reset password with token
- `POST /api/v1/auth/verify-email` - Email verification

Two-Factor Authentication

- `POST /api/v1/auth/2fa/enable` - Enable 2FA
- `POST /api/v1/auth/2fa/disable` - Disable 2FA
- `POST /api/v1/auth/2fa/verify` - Verify 2FA code

Single Sign-On (Enterprise)

- `GET /api/v1/auth/sso/providers` - Get available SSO providers
- `POST /api/v1/auth/sso/initiate` - Initiate SSO login
- `POST /api/v1/auth/sso/callback` - Handle SSO callback

2. User & Organization Management

User Profile

- `GET /api/v1/users/profile` - Get current user profile
- `PUT /api/v1/users/profile` - Update user profile
- `GET /api/v1/users/settings` - Get user settings
- `PUT /api/v1/users/settings` - Update user settings
- `GET /api/v1/users/activity-log` - Get user activity log

Team Management

- `GET /api/v1/organizations/{org_id}/members` - Get team members

- `POST /api/v1/organizations/{org_id}/members` - Invite team member
- `PUT /api/v1/organizations/{org_id}/members/{user_id}` - Update member role
- `DELETE /api/v1/organizations/{org_id}/members/{user_id}` - Remove team member
- `GET /api/v1/organizations/{org_id}/invitations` - Get pending invitations
- `DELETE /api/v1/organizations/{org_id}/invitations/{invitation_id}` - Cancel invitation

Role-Based Access Control

- `GET /api/v1/roles` - Get available roles
- `GET /api/v1/permissions` - Get available permissions
- `POST /api/v1/organizations/{org_id}/roles` - Create custom role
- `PUT /api/v1/organizations/{org_id}/roles/{role_id}` - Update role permissions

3. Invoice Management

Invoice Operations

- `POST /api/v1/invoices/upload` - Upload invoice files
- `GET /api/v1/invoices` - Get invoices list (with pagination, filters)
- `GET /api/v1/invoices/{invoice_id}` - Get specific invoice details
- `PUT /api/v1/invoices/{invoice_id}` - Update invoice data
- `DELETE /api/v1/invoices/{invoice_id}` - Delete invoice
- `POST /api/v1/invoices/{invoice_id}/process` - Trigger AI processing
- `GET /api/v1/invoices/{invoice_id}/status` - Get processing status

Bulk Operations

- `POST /api/v1/invoices/bulk-upload` - Upload multiple invoices
- `POST /api/v1/invoices/bulk-process` - Process multiple invoices
- `PUT /api/v1/invoices/bulk-update` - Update multiple invoices
- `DELETE /api/v1/invoices/bulk-delete` - Delete multiple invoices

Invoice Data Extraction

- `GET /api/v1/invoices/{invoice_id}/extracted-data` - Get AI-extracted data
- `PUT /api/v1/invoices/{invoice_id}/extracted-data` - Update/correct extracted data

- `POST /api/v1/invoices/{invoice_id}/validate` - Validate extracted data
- `GET /api/v1/invoices/{invoice_id}/confidence-score` - Get extraction confidence

4. Data Processing & Validation

Data Checking & Correction

- `GET /api/v1/data-validation/pending` - Get items needing validation
- `POST /api/v1/data-validation/{item_id}/approve` - Approve extracted data
- `POST /api/v1/data-validation/{item_id}/reject` - Reject and request correction
- `PUT /api/v1/data-validation/{item_id}/correct` - Submit corrections

Processing Queue

- `GET /api/v1/processing/queue` - Get processing queue status
- `POST /api/v1/processing/priority/{invoice_id}` - Set priority processing
- `GET /api/v1/processing/history` - Get processing history

5. Bank Reconciliation

Reconciliation Operations

- `POST /api/v1/reconciliation/create` - Create reconciliation report
- `GET /api/v1/reconciliation/reports` - Get reconciliation reports
- `GET /api/v1/reconciliation/reports/{report_id}` - Get specific report
- `PUT /api/v1/reconciliation/reports/{report_id}` - Update reconciliation
- `POST /api/v1/reconciliation/reports/{report_id}/export` - Export report

Bank Data Integration

- `GET /api/v1/bank-accounts` - Get connected bank accounts
- `POST /api/v1/bank-accounts/connect` - Connect new bank account
- `DELETE /api/v1/bank-accounts/{account_id}` - Disconnect bank account
- `GET /api/v1/bank-accounts/{account_id}/transactions` - Get bank transactions
- `POST /api/v1/bank-accounts/{account_id}/sync` - Sync bank data

6. Analytics & Reporting

Dashboard Data

- `GET /api/v1/dashboard/overview` - Get dashboard overview stats
- `GET /api/v1/dashboard/recent-activity` - Get recent activity feed
- `GET /api/v1/dashboard/processing-metrics` - Get processing performance metrics
- `GET /api/v1/dashboard/team-workload` - Get team workload distribution

Analytics

- `GET /api/v1/analytics/invoice-trends` - Get invoice processing trends
- `GET /api/v1/analytics/vendor-analysis` - Get vendor spending analysis
- `GET /api/v1/analytics/processing-time` - Get processing time analytics
- `GET /api/v1/analytics/accuracy-metrics` - Get data extraction accuracy metrics
- `GET /api/v1/analytics/cost-savings` - Get cost savings reports

Custom Reports

- `POST /api/v1/reports/create` - Create custom report
- `GET /api/v1/reports` - Get saved reports
- `GET /api/v1/reports/{report_id}` - Get specific report
- `PUT /api/v1/reports/{report_id}` - Update report
- `DELETE /api/v1/reports/{report_id}` - Delete report
- `POST /api/v1/reports/{report_id}/schedule` - Schedule report delivery

7. Integrations

Accounting Software

- `GET /api/v1/integrations/available` - Get available integrations
- `POST /api/v1/integrations/quickbooks/connect` - Connect QuickBooks
- `POST /api/v1/integrations/xero/connect` - Connect Xero
- `POST /api/v1/integrations/netsuite/connect` - Connect NetSuite (Growth+)
- `POST /api/v1/integrations/sap/connect` - Connect SAP (Growth+)
- `DELETE /api/v1/integrations/{integration_id}` - Disconnect integration

Custom API (Enterprise)

- `POST /api/v1/integrations/custom/webhook` - Create custom webhook
- `GET /api/v1/integrations/custom/webhooks` - Get webhook configurations
- `PUT /api/v1/integrations/custom/webhooks/{webhook_id}` - Update webhook

- `DELETE /api/v1/integrations/custom/webhooks/{webhook_id}` - Delete webhook

Data Sync

- `POST /api/v1/integrations/{integration_id}/sync` - Trigger data sync
- `GET /api/v1/integrations/{integration_id}/sync-status` - Get sync status
- `GET /api/v1/integrations/{integration_id}/sync-history` - Get sync history

8. Subscription & Billing

Subscription Management

- `GET /api/v1/subscription/current` - Get current subscription details
- `POST /api/v1/subscription/upgrade` - Upgrade subscription plan
- `POST /api/v1/subscription/downgrade` - Downgrade subscription plan
- `PUT /api/v1/subscription/billing-cycle` - Change billing cycle (monthly/annual)

Usage Tracking

- `GET /api/v1/usage/current-month` - Get current month usage
- `GET /api/v1/usage/history` - Get usage history
- `GET /api/v1/usage/limits` - Get plan limits and current usage
- `POST /api/v1/usage/alerts` - Set usage alerts

Billing

- `GET /api/v1/billing/invoices` - Get billing invoices
- `GET /api/v1/billing/invoices/{invoice_id}` - Get specific billing invoice
- `GET /api/v1/billing/payment-methods` - Get payment methods
- `POST /api/v1/billing/payment-methods` - Add payment method
- `PUT /api/v1/billing/payment-methods/{method_id}` - Update payment method
- `DELETE /api/v1/billing/payment-methods/{method_id}` - Remove payment method

9. Notifications & Communication

Notifications

- `GET /api/v1/notifications` - Get user notifications

- `PUT /api/v1/notifications/{notification_id}/read` - Mark notification as read
- `POST /api/v1/notifications/mark-all-read` - Mark all notifications as read
- `GET /api/v1/notifications/settings` - Get notification preferences
- `PUT /api/v1/notifications/settings` - Update notification preferences

Email & Alerts

- `POST /api/v1/alerts/create` - Create custom alert
- `GET /api/v1/alerts` - Get configured alerts
- `PUT /api/v1/alerts/{alert_id}` - Update alert
- `DELETE /api/v1/alerts/{alert_id}` - Delete alert

10. Support & Help

Support Tickets

- `POST /api/v1/support/tickets` - Create support ticket
- `GET /api/v1/support/tickets` - Get user's support tickets
- `GET /api/v1/support/tickets/{ticket_id}` - Get specific ticket
- `PUT /api/v1/support/tickets/{ticket_id}` - Update ticket
- `POST /api/v1/support/tickets/{ticket_id}/messages` - Add message to ticket

Knowledge Base

- `GET /api/v1/help/articles` - Search help articles
- `GET /api/v1/help/articles/{article_id}` - Get specific article
- `GET /api/v1/help/categories` - Get help categories
- `POST /api/v1/help/feedback` - Submit article feedback

11. Security & Compliance

Security Settings

- `GET /api/v1/security/sessions` - Get active sessions
- `DELETE /api/v1/security/sessions/{session_id}` - Terminate session
- `GET /api/v1/security/login-history` - Get login history
- `POST /api/v1/security/api-keys` - Generate API key
- `GET /api/v1/security/api-keys` - Get API keys
- `DELETE /api/v1/security/api-keys/{key_id}` - Revoke API key

Audit & Compliance

- `GET /api/v1/audit/logs` - Get audit logs (Enterprise)
- `POST /api/v1/compliance/export-data` - Export user data (GDPR)
- `POST /api/v1/compliance/delete-data` - Request data deletion
- `GET /api/v1/compliance/certifications` - Get compliance certifications

12. File Management

File Operations

- `POST /api/v1/files/upload` - Upload file
- `GET /api/v1/files/{file_id}` - Download file
- `DELETE /api/v1/files/{file_id}` - Delete file
- `GET /api/v1/files/{file_id}/metadata` - Get file metadata
- `POST /api/v1/files/bulk-upload` - Bulk file upload

Document Processing

- `POST /api/v1/documents/ocr` - OCR processing
- `GET /api/v1/documents/{doc_id}/preview` - Get document preview
- `POST /api/v1/documents/{doc_id}/extract` - Extract data from document

API Design Considerations

RESTful Principles

- Use standard HTTP methods (GET, POST, PUT, DELETE)
- Consistent resource naming conventions
- Proper HTTP status codes
- JSON request/response format

Pagination & Filtering

- Standard pagination parameters: `page`, `limit`, `offset`
- Filtering: `?status=pending&date_from=2025-01-01`
- Sorting: `?sort_by=created_at&order=desc`

Rate Limiting

- Different limits based on subscription tier
- Standard headers: `X-RateLimit-Limit`, `X-RateLimit-Remaining`

Versioning

- URL versioning: `/api/v1/`
- Backward compatibility maintenance

- Deprecation notices

Security

- JWT tokens for authentication
- API key authentication for integrations
- Request signing for sensitive operations
- Input validation and sanitization