



## Portfolio Management System

We utilize the latest technical advancements including AI to respond to the growing needs of broker dealers, professional traders, clearing firms, and exchanges. Our team of industry veterans have deep experience developing and implementing complex solutions across the securities and derivatives industry. Firms can leverage Sarna's full suite or select specific offerings including Buying Power Engine, order and portfolio management systems (OMS/PMS), mobile and web user interface, security and authentication, back-office systems, database management, middleware and APIs, and infrastructure as code.

### FOUNDATION

FEATURE	DETAILS
Multiple Asset Classes	Stocks, ETFs, Options, Futures, Crypto, Mutual Funds
Multiple Account Types	Individual, Joint, IRA, Roth IRA, Portfolio Margin
Account Onboarding	US and International Accounts
User and Account Management	Trading levels, suitability, trading restrictions, commission rates, subscription management, market data entitlements
Ad Hoc Fee Assignment	Apply special fees to specific accounts
Document Library	Central storage for account agreements and entitlements
Buying Power Engine Integration	Reg T, portfolio margin, advanced options strategies
Admin/Operations UI	Account access, permissions, approvals, management, and audit trail
Multi-Venue Execution Routing	FIX sessions for trade execution and drop-copy

### CLEARING HOUSE INTEGRATIONS

FEATURE	DETAILS
Clearing Firm Agnostic	<ul style="list-style-type: none"> <li>Integrate with any or multiple clearing firms</li> <li>Custom EOD reporting and data drops</li> </ul>
BP Configured with Clearing House Rules	<ul style="list-style-type: none"> <li>Configure and adjust buying power rules to accommodate specific clearing house thresholds and parameters intra-day</li> <li>Provide pre-trade coverage to minimize EOD breaks, margin calls, and insolvency issues</li> </ul>
Beginning of Day Tasks	Automation of tasks such as drops to clearing house
Morning Reconciliation	<ul style="list-style-type: none"> <li>Cross-clearinghouse BOD files sync</li> <li>Intake of advanced data such as tax lots and options assignments</li> <li>Fully automated monitoring and breaks reporting</li> </ul>
Open Tax Lot Management	<ul style="list-style-type: none"> <li>Purchase date, cost, current value, gain/loss</li> <li>Short vs. long term status</li> <li>Can sync up with external OMS or book-keeping system</li> </ul>
Fees and Commissions	<ul style="list-style-type: none"> <li>Logic and rules for pulling fees and commissions when primary account lacks funds</li> <li>Multiple types and levels of default schedules</li> </ul>
Account Open Integration	<ul style="list-style-type: none"> <li>ID validation and verification</li> <li>Live-person check</li> <li>ID review for over 200 countries</li> </ul>

### TRADING AND INVESTING

FEATURE	DETAILS
Multi Exchange-Traded Assets	Stocks/ETFs, Options (with spreads), Crypto, Mutual Funds
Easy Order Entry and Preview	<ul style="list-style-type: none"> <li>Pre-set or custom options strategies</li> <li>P/L and risk graph</li> </ul>

FEATURE	DETAILS
	<ul style="list-style-type: none"> <li>Detailed BP effect with exact pairings and requirements in sync with clearing side</li> </ul>
Real-Time Consolidated Quote Display	<ul style="list-style-type: none"> <li>Compliance with Vendor display rule</li> <li>SIPs per request</li> <li>Reporting and billing included</li> </ul>
Multi-Account/Subaccount Trading	Make the same trade across multiple accounts and multiple subaccounts simultaneously
Open-Orders BP Checks	Real-time buying power checks inclusive of orders impact
Real-Time Margin Calculations	<ul style="list-style-type: none"> <li>Simultaneous RegT/SMA and house excess/HSX checks</li> <li>Portfolio Margin</li> </ul>
Roll Options	Ability to roll up to four legs
Fractional Shares	Full support for fractional shares trading including options
Order Status Updates	<ul style="list-style-type: none"> <li>All changes in status, such as: fills, partial fills, rejections</li> <li>Adjustments of balances, position lots, and buying power</li> </ul>
Order Management	<ul style="list-style-type: none"> <li>Admin interface to place, replace, cancel orders, manual trades</li> <li>Automatic handling of trade busts</li> </ul>
Full Virtual Trade	<ul style="list-style-type: none"> <li>Simulation of real market conditions</li> <li>Same features and functions as demo and real-money modes</li> <li>Virtual Admin capability (some limits)</li> </ul>
Executing Broker Agnostic	Use our existing connection or bring your own
Limited Margin for IRAs	The ability to use unsettled funds for a trade (with clearing house approval)

## ACCOUNT MANAGEMENT (USER)

FEATURE	DETAILS
Money Movement	<ul style="list-style-type: none"> <li>External account withdrawal and deposits</li> <li>Transfer between subaccounts</li> <li>Fee withdrawal from accounts</li> </ul>
Subaccounts	<ul style="list-style-type: none"> <li>Create, edit, and delete subaccounts in any account</li> <li>Buying power applied to each subaccount</li> </ul>
Position Transfers	<ul style="list-style-type: none"> <li>Move positions between subaccounts</li> <li>Buying power engine checks originating and destination subaccounts prior to approving transfer</li> </ul>
Position Pairing	<ul style="list-style-type: none"> <li>User-defined position pairings</li> <li>Buying power engine maintains integrity in background</li> </ul>
Account Activity	<ul style="list-style-type: none"> <li>Deposits/Withdrawals</li> <li>Dividend and Interest</li> <li>Trades</li> </ul>

## ACCOUNT MANAGEMENT (ADMIN)

FEATURE	DETAILS
Open Task Queue	<ul style="list-style-type: none"> <li>New Account Approval (with Automated Trading Level/Suitability Recommendation)</li> <li>Trading Level Requests</li> <li>Market Data Entitlements (Pro/Non-Pro)</li> </ul>
Edit Status	Active, Pending, Blocked, Closing Trades Only, Pending KYC, Custom
Access User Accounts	<ul style="list-style-type: none"> <li>Real-time view of all account details</li> <li>Trade on behalf of client (advisor permission)</li> <li>Change settings</li> <li>Change type (cash, margin, limited margin)</li> </ul>
Audit Trail	<ul style="list-style-type: none"> <li>Permanent activity log</li> <li>Tracks user and admin activity within accounts</li> <li>Timestamps, IP address, User ID</li> </ul>

## REPORTING

FEATURE	DETAILS
CAT Reporting	Compliant with FINRA reporting requirements
Portfolio Margin	<ul style="list-style-type: none"><li>On-demand calculations</li><li>TIMS calculations</li><li>Custom price shock scenarios</li><li>Custom IV shock scenarios</li><li>Greeks</li><li>OCC-compliant weekly report output</li></ul>

## DEVOPS SERVICES

FEATURE	DETAILS
Infrastructure as Code	<ul style="list-style-type: none"><li>Cloud and API native brand-new tech stack</li><li>Upgrade or substitute legacy systems and their bottlenecks</li><li>Transparency and log of applied configurations</li></ul>
Automation	Worry-free monitoring and management
Management	<ul style="list-style-type: none"><li>Sarna makes adjustments on as-needed basis, taking your guidance and also making expert recommendations</li><li>Transparency of cloud cost structure</li></ul>
Database Updates	Sarna DevOps keeps your cloud system current and operating optimally