Customer Profile
California State Teachers Retirement System (CalSTRS) is America’s second largest public pension fund and the largest educator-only pension fund in the world. Headquartered in West Sacramento, CalSTRS is both a world-class financial services institution and a state agency, serving 868,000 members. Assets were $189 billion as of June 30, 2014.

New Challenges
Reduce operating costs by moving Natural batch to the less-expensive IBM zIIP™ processor.

Software AG Solutions
Natural Batch for zIIP
CalSTRS also uses:
• Adabas Database Management System
• Natural Application Development
• webMethods EntireX

Key Benefits
• Recouped investment in only five months
• Saved $623,768 in the first eight months—savings will continue for life
• Increased flexibility—because of new lower processing costs, some processes can be moved to the mainframe
• Reduced mainframe TCO
• No changes to code required

20+ years—and going strong
For years, CalSTRS has reliably run its core mission-critical application on Adabas & Natural. The CalSTRS START system manages teachers’ retirement programs so that disability, retirement and survivor benefits can be provided to 868,000 public school educators and their families.

Processing close to a billion records, START is a comprehensive system, explained Database Administrator Mohammad Asghar. It combines accounting functionality with auditing, central services and applications for the contact center. Members can access and manage their account information anywhere/anytime since CalSTRS built the myCalSTRS (mycalstrs.com) web front-end for the mainframe-based START application using Software AG’s webMethods EntireX.

“Natural zIIP enablement has exceeded CalSTRS expectations. It has allowed us to save significant Natural batch processing costs in a span of few short months with very little effort.”

— Mohammad Asghar | Adabas DBA, Business Solutions, CalSTRS
“Adabas/Natural/EntireX software products are important for CalSTRS to administer benefits accurately, consistently and in a timely manner,” Asghar said. “Adabas is used to process large volumes of member records reliably and efficiently. Natural is well liked as it was easy to learn and program as was EntireX for its speed and ability to handle a large number of messages using web-based integrated application.”

Recently CalSTRS added Natural Batch for zIIP, an add-on product, and realized immediate cost savings at the same reliable performance.

“A pleasant surprise”

CalSTRS has found Adabas & Natural to be very responsive especially when processing very large volumes of data. To achieve this same performance at a lower cost for the mission-critical START system, CalSTRS now uses Natural Batch for zIIP. This Natural add-on moves the work of non-I/O batch Natural on an IBM Central Processor (CP) to cheaper zIIP processors for execution, saving on mainframe costs and lowering TCO.

“The DBA team was on the look out to save costs, and Software AG came up with the Natural zIIP enablement solution,” Asghar said. “The timing was just right to conduct a pilot and to determine whether zIIP was a viable solution to save processing costs—which it was. The zIIP proof of concept proved a pleasant surprise. It worked very well in a relatively short period of time.”

Low risk, low cost

There were no Natural code changes or modification to batch jobs for the START application to use Natural Batch for zIIP. That was a huge selling point, according to Asghar, since his team was concerned that a new product would require more testing and more validation—in short, more time to realize savings.

Asghar is pleased to report: “We didn’t have to change anything—there were no changes to the Natural code and no JCL changes.”

Savings also happened faster than planned. The agency expected to recoup the investment cost over the first year but achieved this savings in the first five months. In eight months, CalSTRS saved a total of $623,768—$77,971 a month. CalSTRS is saving on both batch processing as well as online processing costs.

There have been no performance changes; processes run in about the same time on the zIIP processor as on the GPP. An unexpected benefit is that CalSTRS has been able to run some business processes on the mainframe faster and at a lower cost than on the server.

“This gives us more flexibility,” he said. “Before, we didn’t run these processes on the mainframe because of cost. Now that the cost has dropped, and if we are in a time crunch, we can run them on the mainframe.”

A trusting partnership

CalSTRS’ mission is securing the financial future and sustaining the trust of California’s educators. To CalSTRS, Software AG has proven to be a software provider worth trusting.

“CalSTRS’ experience with Software AG technology has been progressive,” Asghar said. “We built and operate application systems using Adabas/Natural/EntireX on the mainframe, servers and the web that have served our customers and, in the process, supported our organization’s goals.”

Taking the next step with Natural Batch for zIIP “has been very encouraging,” he added.