



## Marketing of Streambox's Live Video Compression and Distribution System Begins

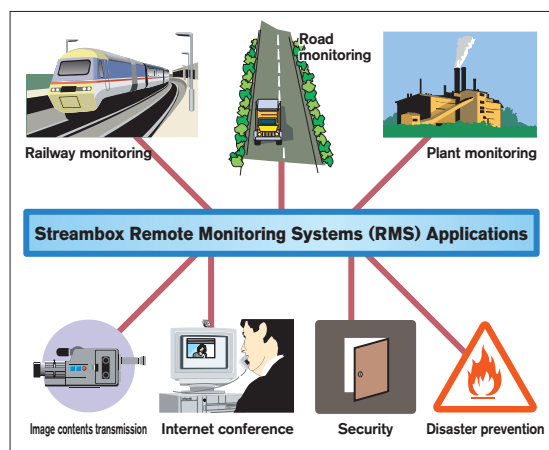
TEC has concluded a contract with Streambox Inc., of the United States, for the marketing for industrial use of its Remote Monitoring Systems (RMS), a live video compression and distribution system that uses LAN and Internet lines.

Streambox's technology provides full-screen motion pictures of high-resolution (VHS to DVD picture quality) in real time for Internet distribution and the necessary transmission band speeds of 30 kbps to 8 Mbps to cover PHS and normal Internet lines as well as broadband.

There is ever-increasing demand in chemical and nuclear plants, commercial, R&D, and industrial facilities, government-related premises, and road and rail-road transportation for high-resolution live video distribution systems. Streambox solutions, such as the live video compression and distribution system, are expected to fuel the expansion of Internet motion picture distribution (streaming), which is entering the broadband era.

TEC plans to commercialize the Streambox RMS not only for remote surveillance but also for Internet conferencing systems as well as systems for distributing live video in combination with audio.

Between November 27 and 30, 2001, TEC demonstrated equipment related to this system at the 23rd INCHEM TOKYO 2001, held at Tokyo Big Sight (Tokyo International Exhibition Center).



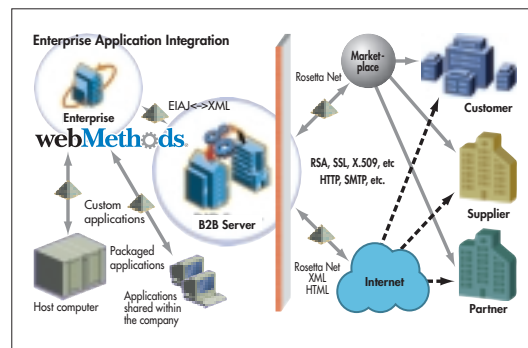
## TEC and webMethods in Business Tie-up for Integrated Intra- and Inter-Enterprise Application Solutions

TEC has concluded a reseller partnership with webMethods, K.K., Japan's leading provider of integration software, and a wholly owned subsidiary of webMethods, Inc., of the United States, a world-wide leading integration software provider. By offering integration backbone solutions based on webMethods' technology, TEC can provide Japanese industrial and manufacturing companies with the most comprehensive platform for information integration.

As the basic application integration technology for Global Supply Chain Management (Global SCM) promoted by TEC's e-Solutions Business Operations, webMethods' superior technology in the area of EAI (Enterprise Application Integration) and B2Bi (Business-to-Business integration) will be employed to integrate legacy systems, the latest package solutions, and web-based e-business solutions. This will enhance a company's ability to share information between its suppliers and customers and to automate data transfer tasks among various applications used in individual departments or between trading partners' in-house applications. TEC will provide solutions that offer a higher return on investment and that will allow companies to respond faster and more flexibly to the rapidly changing business environment. Also, through this tie-up, TEC and webMethods will be well positioned to offer the latest information-integrated solutions based on world standards to a wide range of manufacturing and distribution businesses in such fields as oil and petrochemicals; electric power and other energy fields; automobile, electronics, and industrial machine processing and assembly; and fine chemicals and pharmaceuticals.

Increasingly, companies are looking to establish the optimal supply chain that is competitive on a global scale. At the same time, it is essential for companies to form cooperative tie-ups or alliances by utilizing their individual corporate strengths. TEC and webMethods' business alliance is expected to strongly support this international movement.

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For further details, please access <http://www.toyo-eng.co.jp/esoll> or <http://www.webMethods.co.jp>



## TTCL and TOYO-M: The TEC Group's Transnational Bases in Southeast Asia

*The TEC Group's key operating strategy is to promote the development of a transnational business structure. Here, we outline several of the independent project orders that have been received by two Southeast Asia-based affiliates, Toyo Thai Corporation Ltd. (TTCL) and Toyo Engineering & Construction Sdn. Bhd. (TOYO-M). TEC intends to expand its transnational structure to further strengthen the global business operations of the Group.*

### [TTCL]

- ★ TTCL has been awarded a contract by THASCO CHEMICAL CO., LTD., one of the leading chlor-alkali producers in Southeast Asia, for a liquid chlorine unit as part of an expansion project that company is undertaking at its second chlor-alkali plant in Map Ta Phut, Rayong. The scope of TTCL's work covers design, equipment and materials procurement, and construction, which is due for completion by March 2002. Over the past six years, TTCL has constructed four chemical plants for THASCO CHEMICAL, which is a joint venture between Asahi Glass Company, of Japan, and Srifuengfung's Family, of Thailand.
- ★ TTCL won a safety award from BAYER THAI CO., LTD., the Thai subsidiary of Bayer AG, of Germany, one of the world's chemical majors, for recording one million working-hours without an accident in a construction project under way to build a 160,000-ton Bisphenol-A (BPA) plant in Map Ta Phut. The plant has been successfully completed, and a Mechanical Completion Certificate was issued on October 19, 2001.

### [TOYO-M]

- ★ TOYO-M has been awarded a contract, along with locally based BROOKE DOCKYARD & ENGINEERING WORKS CONSTRUCTION Sdn. Bhd., for construction management services for the installation of an MC-4 package (Mechanical Work for Condensate Stabilization Unit) for an LNG-TIGA construction project being conducted by JGC and Kellogg Brown & Root in Bintulu, Sarawak. TOYO-M was awarded this contract for management services following an order for consulting services related to a construction project from MTBE (M) Sdn. Bhd., a subsidiary of PETRONAS, in 2000.
- ★ TOYO-M has received an order from PETLIN (M) Sdn. Bhd., a subsidiary of PETRONAS, in Kertih, Terengganu, for workshop design, equipment procurement services, and construction management. TOYO-M's efforts to meet customer needs through closer customer-oriented marketing helped in securing the order.
- ★ TOYO-M has been awarded a contract for the expansion of production facilities by TIPP (M), a Malaysian affiliate of Toyo Ink Mfg. Co., Ltd., in Serenban, Negeri Sembilan. The scope of TOYO-M's work includes design, equipment procurement, and construction. The company won the order for this project, which is now under way, thanks to TEC's superior technologies and TOYO-M's price competitiveness.
- ★ In December 2001, TOYO-M was awarded a turnkey lump sum contract by BASF PETRONAS Chemicals Sdn. Bhd. for the Engineering, Procurement, Construction, and Commissioning (EPCC) of topside facilities at the Liquid Chemical Berth No.3 (LCB-3) of Kuantan Port, in Kuantan. The engineering and procurement of long lead items have begun, and the project is scheduled for completion in July 2002.

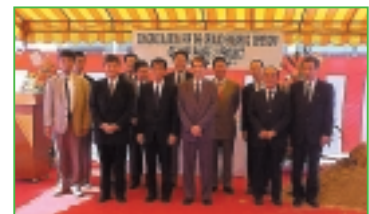
TEC's record of completing numerous plants in refinery and petrochemical fields in Malaysia and the good relationship the Company has developed with clients through plant construction, as well as TEC's highly evaluated technical capabilities and price competitiveness enabled TOYO-M to win these contracts. At the same time, TOYO-M is gradually accumulating a track record both on its own and in collaboration with TEC as one of the Group's transnational bases. TOYO-M is increasing its staff to more than 60 while executing several projects and pursuing new ones. TEC's employees deployed from Japan and TOYO-M's local staff are striving together in these endeavors.



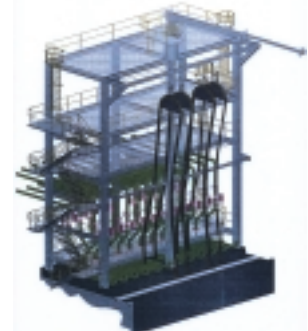
Mr. Akamatsu, Executive Vice President, THASCO CHEMICAL CO., LTD. (center, left) and Mr. Sugiura, President, Toyo Thai Corporation Ltd. (center, right), at the signing of the contract



Mr. Sugiura, President, Toyo Thai Corporation Ltd. (center, right), receiving the Safety Award Certificate from Dr. Werner Hutt, President, Bayer Thai Co., Ltd. (center, left)



Mr. Tanaka, Executive Director, Toyo Ink Mfg. Co., Ltd. (center, right), and Mr. Nishihara, Deputy Division Director of Domestic Business Headquarters, TEC (center, left), at the ground-breaking ceremony



Hose Tower Structure, installed with crane and winch system, which will be utilized to connect the hose to the ship manifold