



OPERA SOFTWARE ASA  
**2002**



[ Opera, ae, f./lat): work, labor, task, attention, care, service. ]

## THE BEGINNING

In 1992, a group of researchers working for the Norwegian state telecommunication company Telenor explored an early version of the World Wide Web. In 1994 Mr. Tetzchner and Mr. Ivarsøy began to develop their own Internet browser software. Telenor used the first versions of the new browser, but decided not to commercialize the product. As a monopoly telecommunications company that was facing deregulation, its focus was not yet on the Web in these early days. Therefore, in June 1995, Mr. Tetzchner and Mr. Ivarsøy acquired the rights to the browser solution and founded Opera Software ASA.

In September 1996, the first free version (shareware) of Opera 2.1 was made available on the Web. And from then on the number of users grew slowly, but steadily.

## ENLARGING THE SCOPE

The year 1998 was a pivotal year for Opera Software. From being completely focused on the Windows platform for desktop PCs, Opera enlarged its focus towards encompassing the new emerging market for Internet devices. The competitive advantages of small size and speed opened up new possibilities in this new and fast growing market. Opera made a strategic decision to start the development of the browser on new platforms such as EPOC (Symbian OS), Linux, and Mac OS.

In 2000, commercialization started. Top industry players were quick to sign up. During that year, agreements were signed with Ericsson Mobile Communications, Psion, AMD, and others.

In December 2000, the first free and ad-sponsored browser of the Opera desktop browser, Opera 5.0 for Windows, was launched. During 2001 the browser was downloaded and installed by more than 6 million users. At the same time, Opera signed contracts in the embedded market with IBM, Symbian, Canal+ Technologies, Sony, Sharp, and others.

In 2002, some of the products that were a result of these contracts were launched in the market, including the Sharp Zaurus PDA and the Nokia 9210i Communicator.

## TECHNOLOGICAL BREAKTHROUGH

Although Opera (and other browsers) were available on mobile phones such as the Nokia Communicator 9210i, a problem remained: the display of Web pages was a disappointment because Web pages had been made to fit larger monitors, not the screen size offered by a mobile phone. To browse from their mobile phones users had to scroll right to read to the end of a line or see a large picture. Then scroll back and down to start on the next line. No wonder the mobile Internet was not taking off.

In November 2002, Opera announced that the content formatting problem of the mobile Web was solved. By utilizing Opera's Small Screen Rendering (SSR) technology on mobile phones, the content of a desktop Web page is reformatted to fit the screen width of a mobile device - eliminating the need for horizontal scrolling. The response from the press and the mobile industry was positive. A commercial deal with Sony Ericsson was quickly reached, and already in the beginning of 2003 the first users were able to upgrade their Sony Ericsson P800 phones with Opera's smartphone edition browser with SSR. Opera is currently negotiating with many other handset manufacturers and mobile operators, to ensure Opera being included as default on more phones.

## UNIQUE BROWSER TECHNOLOGY

### SMALL-SCREEN RENDERING

Opera's engineers have solved the small-screen problem that has plagued the mobile Internet for many years. With SSR, Opera reformats the presentation of pages made for the desktop Web, eliminating the need for horizontal scrolling to navigate fixed-width Web pages.

### OPEN STANDARDS

Since its inception, Opera has strived to implement the standards recommended by the World Wide Web Consortium (W3C) and forums like the Open Mobile Alliance (OMA) with no proprietary extensions. Opera also plays an important role in formulating the new standards that will define tomorrow's Web and adheres to international, open standards including all major Web standards from the W3C.

### STREET HTML

In addition to adhering to the standards set by the W3C, Opera also supports Web pages that break these rules and standards, resulting in a Web language often referred to as Street HTML. As many as 99% of Web pages on the Internet lack proper standards-compliant code, causing potential access and display problems to browsers that do not know how to handle Street HTML. Thanks to the contribution of Opera's millions of desktop users over the years, Opera can render more Web sites correctly than any other embedded browser.





## MODULAR ARCHITECTURE

Opera's unique architecture is ideal for developing solutions that can be easily integrated into new platforms and environments. Built around a modular architecture, the browser allows for complete customization to fit into each partner's products.

## SECURITY

Users can browse safely knowing that Opera supports the latest in security standards, allowing access to sites like banks and other commercial outlets.

## SMALL SIZE

Opera is coded with wireless developers' needs for small size and low resource consumption in mind. Opera easily fits into all data-centric mobile devices.

## CROSS-PLATFORM CORE

Partners quickly share in the progress made on all of Opera's platforms, including the feedback given by the millions of Opera users surfing the real Web on their PCs. Opera's browser technology is built upon an independent cross-platform core, with platform-dependent layers added to the core's exterior. As new functionality is added to the core, it automatically becomes available on all platforms.

## OPERA FULL HTML BROWSER

What has made the Internet a success is the abundance of easily accessible information and services. Without compelling content, the Web or any other type of services, become uninteresting to the user.

For many years, developers have tried to introduce new languages specially made to display the mobile Web, such as WAP. This has not been a success, largely because there has been a general lack of content as well as images, colors, and illustrations.

With Opera, on the other hand, users can enjoy full Internet and access to all their favorite desktop sites. This is possible, because the Opera browser supports Street HTML, which is the most common language of the Internet. Thanks to the many desktop users who have tested the Opera core for more than seven years, mobile phone users can now gain access to their favorite Web sites. The learning curve is short, and the enjoyment and use of the mobile Web can finally reach its full potential.

Operators have the ability to create advanced portals and customized services, and can also enjoy a general rise in traffic. Since SSR gives the user access to all existing Web sites, increasing average revenue per user (ARPU).

The mobile Web is not the only market where Opera's HTML browser can be utilized to its fullest. Opera foresees many interesting business opportunities within vertical markets and entertainment within applications for home products including entertainment systems, game consoles, or interactive TV: health services for pharmaceuticals or doctors; car navigation and entertainment; or building automation applications like air condition and heat control, security, access control, energy management, and much more.

## VISION AND GOALS

Opera's vision is to deliver the best Internet experience on any device on all major platforms.

Opera Software aims to become the major browser vendor in the growing market of Internet devices and to also reach a significant niche position in the PC desktop market.

It is important for Opera to focus on commercial relationships with major Internet device manufacturers to have the Opera browser included as the default browser on key Internet devices.

Opera plans to generate revenues from the browser in markets where the browser has significant advantages in terms of size, speed, stability, and functionality.

## PARTNERS

Opera Software has been developing products with several key industry leaders, including Symbian, Sharp, Sony Ericsson, Ericsson, Nokia, IBM, Canal+Technologies in the market for Internet devices. In the desktop space, Opera has partnered with companies including Google, Lycos, Earthlink, Amazon.

## ORGANIZATION

Opera Software has been delivering products to several industry leaders over the years and has become known for its outstanding development. Opera's employees come from all over the world, and from as many as 16 different nations, and approximately 45% of the employees come from other countries than Norway.



## EXECUTIVE TEAM



**Jon S. von Tetzchner**, chief executive officer, CEO

Tetzchner is one of the two founders and the CEO of Opera Software. Tetzchner worked for Telenor Research from 1991 to 1995, when he and his colleague Geir Ivarsvøy founded Opera Software. Tetzchner has been responsible for business development and management at Opera. Tetzchner holds a master's degree in computer science from the University of Oslo.



**Christian Jebsen**, chief financial officer /chief operating officer (CFO/COO)

Jebsen worked six years (1991-1997) within corporate finance, investment banking in London, Stockholm and Oslo at Nomura International and Enskilda Securities. Prior to joining Opera, Jebsen worked as the CEO of Stavdal ASA, a company listed on the Oslo Stock Exchange. Stavdal was acquired in January 2000, at which time Jebsen joined Opera. Christian Jebsen holds a bachelor's degree in business economics from Copenhagen Business School.



**Håkon Wium Lie**, chief technology officer, CTO

Wium Lie is Opera Software's CTO. Wium Lie is a Web pioneer, having worked on the WWW project at CERN, the cradle of the Web. He first suggested the concept of Cascading Style Sheets in 1994, and he later joined W3C to further strengthen the standard. In 1999, he was listed among Technology Review's Top 100 innovators of the next century. Wium Lie holds a master's degree in visual studies from MIT's Media Laboratory, as well as undergraduate degrees in computer science from West Georgia College and Østfold College.



**Lars Boilesen**, executive vice president sales and distribution

Boilesen worked four years for the LEGO Group where he was responsible for sales and marketing towards the developing markets in Eastern Europe. He then joined Tandberg Data ASA as sales and marketing, responsible for North Europe/Asia/Pacific, the last year as vice president of worldwide sales. Boilesen holds a bachelor's degree in business economics from Aarhus Business School.



**Rolf Assev**, executive vice president marketing and strategic alliances

Assev worked four years for the Lillehammer Olympic Organizing Committee in the marketing department where he was responsible for developing and negotiating the international and national sponsor contracts. He then joined the leading PR company in Norway, Geelmuyden.Kiese (GK), where he worked four years as a senior consultant responsible for the IT-sector. At GK he was also the key account manager for Microsoft. From 1998 to 1999 he was the general manager for the retail chain Spaceworld. Assev holds a master's degree from the Norwegian School of Economics and Business Administration.



**Christen Krogh**, vice president engineering

Dr. Krogh is in charge of all software development at Opera. Previously, he worked as a research fellow and research scientist at Oslo University and Center for Industrial Research, respectively. He was the group leader and subsequently the research director at SINTEF Telecom and Informatics. Before coming to Opera, he worked with business development for the TV broadcast subsidiary TV2 in Norway. Dr. Krogh holds an interdisciplinary doctorate degree from the University of Oslo, and a bachelor's degree with honors in computer science from Glasgow University.

**Opera Software ASA**

Waldemar Thranes gate 98

Pb 2648

NO-0175 Oslo

Norway

**Tel: +47 2416 4000**

Fax: +47 2416 4001

**[www.opera.com](http://www.opera.com)**