## **NVDA**

# **NVDA**

Non
Visual
Desktop
Access

## **NVDA**

Open Source
2 blind men
Volunteers
120+ countries
43+ languages

#### **NVDA URL**

- NV Access
  - www.nvaccess.org
  - http://github.com/nvaccess/nvda
- NVDA 음성엔진 구매
  - https://vocalizer-nvda.com
- Development Snapshot
  - http://www.nvaccess.org/files/nvda/snapshots
- NVDA 주요 기능키 정리
  - http://haeppa.kr/srd/nvda.keystrokes.html

### NVDA 정식버전

Your download will begin automatically after you make your donation. (If you do not wish to donate, choose the 'skip donation this time' option).

#### **Donation Options**

If you wish to donate, you can make a secure payment by credit card or by PayPal account. Amounts are in Australian dollars (AUD). Australian donations over \$2.00 are tax-deductible.

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Email address: hahaha@gmail.com

Keep me up to date with the latest news from NV Access

**DOWNLOAD** 

#### **Additional Resources**

- NVDA features and system requirements
- What's New in this version of NVDA?
- Get extra voices for NVDA
- Get add-ons to enhance NVDA
- Get help and support

## NV Access > DOWNLOAD

#### **NVDA Development Snapshot**

### **NVDA Development Snapshots**

Included here are automatically generated snapshots of the project in its current stat 'bleeding edge' code. There will very possibly be nasty bugs and broken code, and w nevertheless welcome.

All dates and times are in UTC.

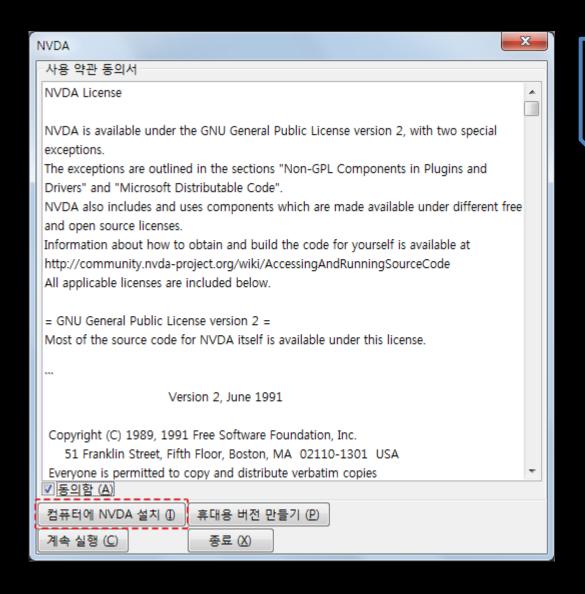
#### next

The next branch contains items being tested for possible inclusion in the next release future release.

Version	Date	Download
<u>13366,5410db6a</u>	Mon Jun 20 03:29:40 2016	<u>Download</u>
13365,6cd0ebac	Sun Jun 19 21:55:58 2016	<u>Download</u>
13363,24458af3	Thu Jun 16 05:49:28 2016	<u>Download</u>
13362,f0e78d7b	Wed Jun 15 09:27:18 2016	<u>Download</u>
13361,c12fe1dc	Tue Jun 14 02:40:11 2016	<u>Download</u>
13360,11382a94	Mon Jun 13 06:30:57 2016	<u>Download</u>

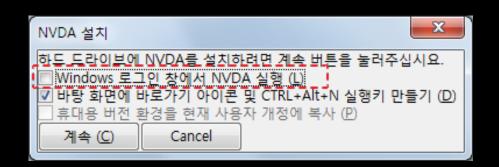
#### 가장 최신 버전

#### NVDA 설치 1/2

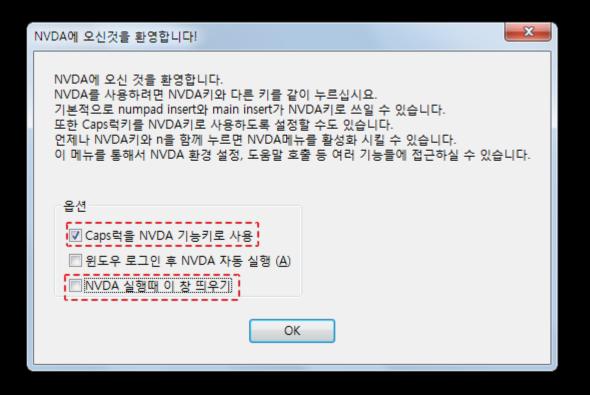


## 동의함 선낵 후 컴퓨터에 NVDA 설치

### NVDA 설치 2/2

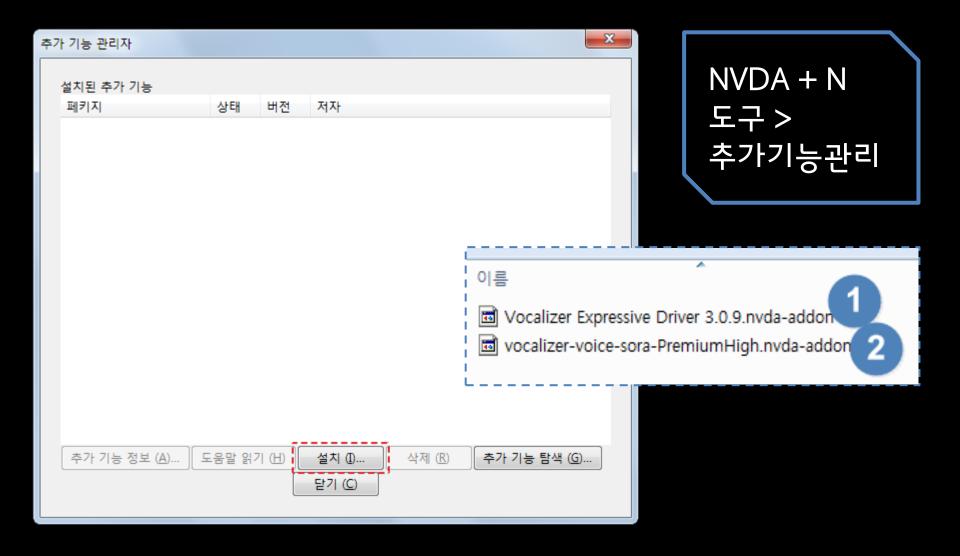


Windwos 로그인… - 해제

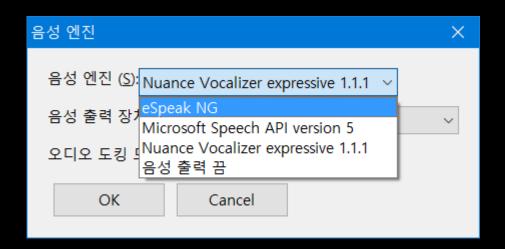


CapLock를 NVDA… - 선택 NVDA 실행때 이… - 해제

## NVDA 음성엔진 설치 (Windows ?)



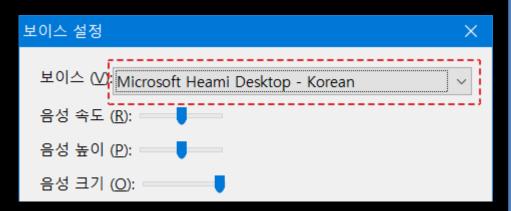
#### NVDA 음성엔진 설정



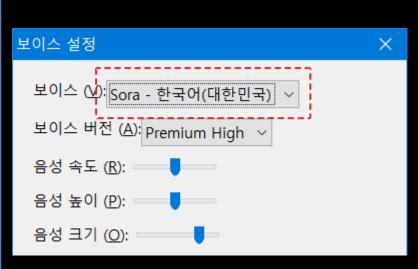
NVDA + N 설정 > 음성엔진 (NVDA + Ctrl + S)

Windows 7
Nuance Vocalizer expressive ···
Windows 8 +
Microsoft Speech API ···
Nuance Vocalizer expressive ···

### NVDA 보이스 설정



Microsoft Speech API



Nuance Vocalizer expressive

#### NVDA WEB - 포커스모드와 브라우즈 모드

#### 포커스모드

- 가상커서 OFF
- Tab 키로 탐색
- 텍스트입력, 컨트롤 조작
- '딸각' 효과음으로 구분
  - Enter

#### 브라우즈모드

- 가상커서 ON
- 방향키, 기능키로 탐색
- 콘텐츠 탐색
- '삑~' 효과음으로 구분

– ESC

NVDA + Spacebar

#### NVDA WEB - 화면 레이아웃모드

• 레이아웃 모드란 음성출력의 기준이 요소단위가 아 닌 화면의 구성에 따르는 방식을 말함

<u>Detail</u> <u>Delete</u> <u>Bookmark</u> <u>Order</u>

 여러 개의 링크와 버튼이 있더라도 한번에 한 줄 단위로 콘텐츠를 탐색하기 때문에 화면의 구성을 이해하고 빠른 탐색에 도움이 됨



#### NVDA 음성출력뷰어

#### NVDA 음성 출력 뷰어

display. But in many cases screen reading software costs more than the computer itself. In the past this has left computers inaccessible to millions of blind people around the world. This is a critical problem, because without computers, access to education and employment is severely limited, not to mention everyday functions such as online banking, shopping and news.

For blind people to use a computer, they need a screen reader which reads the text on the screen in a synthetic voice or with a braille display. But in many cases screen reading software costs more than the computer itself. In the past this has left computers inaccessible to millions of blind people around the world. This is a critical problem, because without computers, access to education and employment is severely limited, not to mention everyday functions such as online banking, shopping and news.

NV Access | Our Story - Chrome 윈도우 NV Access | Our Story 문서

헤딩 레벨 2

Home of the free NVDA screen reader

NVDA + N <u>도구</u> > 음성출력뷰어

#### NVDA 기본 기능키

nttp://haeppa.kr/srd/nvda

- NVDA 7
  - Insert (CapsLock)
- NVDA 메뉴 열기
  - -NVDA+N
- NVDA 종료
  - -NVDA+Q
- CapsLock on/off
  - 2번 누르기

## • 음성조절

- NVDA + Ctrl + 좌/우설정항목 선택
- NVDA + Ctrl + 위/아래설정값 조절

#### • 일시정지

– NVDA + Shift + S

#### NVDA 함께 사용하기

- 다음에서 뉴스기사 확인하기 (landmark roles)
  - <a href="http://media.daum.net">http://media.daum.net</a>
- 다음메일 작성하기 (+ dialog)
  - <a href="http://mail.daum.net">http://mail.daum.net</a>
  - \_레이어팝업 http://escrow.gmarket.co.kr/ko/Cart

#### 참조링크

- aria-describedby (링크텍스트 기능보완)
  - http://haeppa.kr/test/aria-ul.button.text.html
- aria-hidden (지도api)
  - http://haeppa.kr/test/aria-hidden.map.html
- aria-haspopup (링크의 기능 구체화)
  - http://haeppa.kr/test/aria-haspopup.html
- aria-current (현재위치, 날짜 등 구분)
  - http://haeppa.kr/test/aria-current.html
- aria-expanded (컨텐츠 확장여부)
  - http://haeppa.kr/test/aria-expanded.html

### 참조링크 aria-live

- aria-live (선택상자)
  - http://haeppa.kr/test/aria-live.select.html
- aria-live (서제스트)
  - www.daum.net
- aria-live (주식)
  - http://files.paciellogroup.com/training/commonsamples/stocks/in dex.html
- aria-live (채팅)
  - http://chat.karlgroves-sandbox.com/

### 참조링크 for JAWS

- aria-flowto (선형구조 보완) =
  - http://3needs.org/en/testing/code/aria-flowto.html
- aria-controls (선형구조 보완) Ins + alt + M
  - Tabs: <a href="https://www.w3.org/TR/wai-aria-">https://www.w3.org/TR/wai-aria-</a>
     practices/examples/tabs/tabs-2/tabs.html