

oneAPI

Single Programming Model
to Deliver Cross-Architecture Performance

문제점

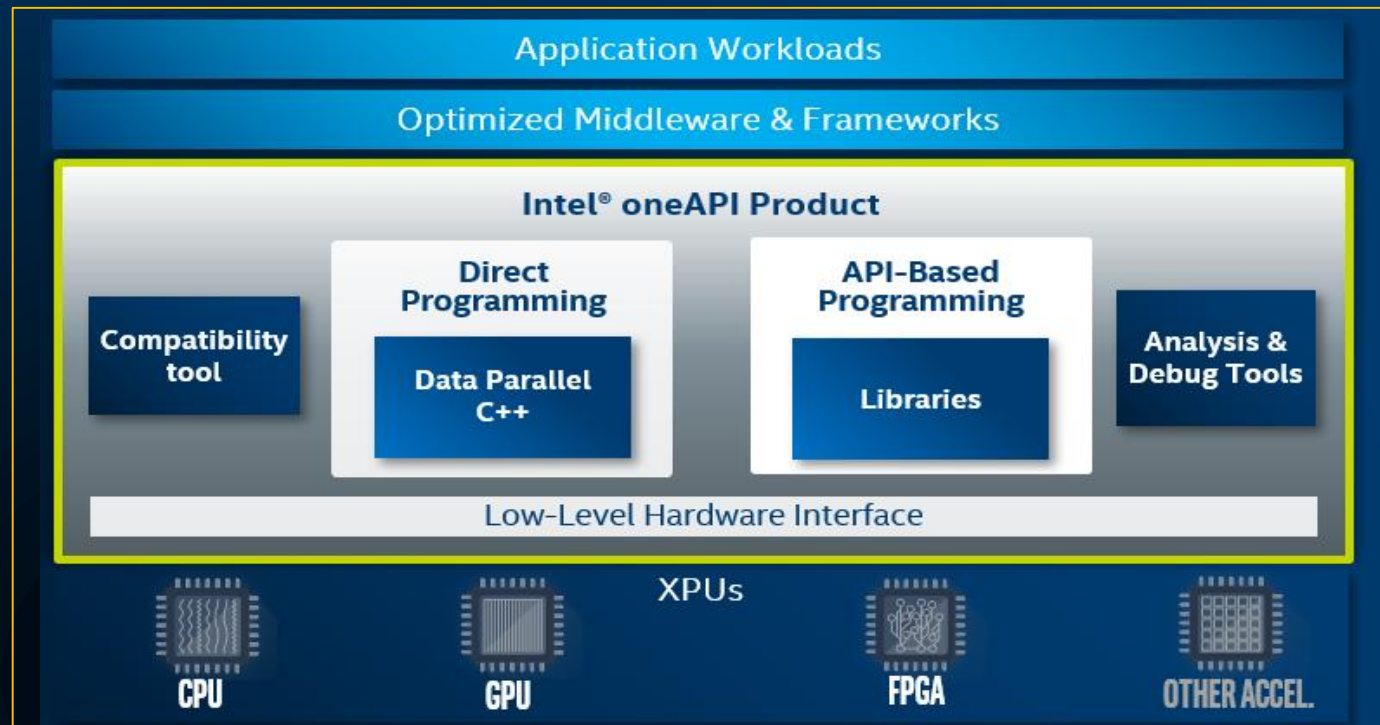
- 전문화 된 워크로드의 증가 하고
- 다양한 데이터 중심 하드웨어 필요 하나
- 표준화된 프로그래밍 언어 또는 API가 없고
- 플랫폼간에 일관되지 않은 도구들을 지원 하기에
- 각각 플랫폼에 고유한 소프트웨어 투자가 필요.

oneAPI Solution

- 다양한 아키텍처에서 개발을 단순화하는 통합 프로그래밍 모델.
- 병렬 처리를 위한 통합되고 단순화 된 언어 및 라이브러리.
- 타협하지 않는 네이티브 고급 언어 성능.
- 산업 표준 및 개방형 사양 기반.
- 기존 HPC 프로그래밍 모델과 상호 운용 가능.

표준화

- 30 개 이상의 회사가 oneAPI '개념을 지원.
- 다양한 Hardware 에서 HPC, AI, Rendering , Bigdata Operation.
- API-based Programming.



ONEAPI INITIATIVE - ECOSYSTEM SUPPORT



These organizations support the oneAPI Initiative 'concept' for a single, unified programming model for cross-architecture development. It does not indicate any agreement to purchase or use of Intel's products.
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oneAPI Partner program

Member of Partners.

- Escomsoft, Uniquet, Moasys, and Sarada got oneAPI partnership to support whole area of Korea customers and whole segments.
- Each partner will get oneAPI certified instructor to provide consulting & education from Dec. 2020.

Support & Activity.

- oneAPI education on webinar, and advertisement through SNS for SI/ISV/CSP/R&D from Dec. 2020.
- Project based oneAPI consulting, and Technical support.
- Supporting AI, HPC, Rendering, FPGA, IOT, System bootup and code conversion tool.
- Planning to provide regular training.

1	eScom SOFT	DL, HPC, Analysis	
2	UNIQUEST	DL, FPGA, IOT	
3	moasys	DL, HPC, Analysis	
4	SARADA KOREA	AI, HPC, Rendering	

Benefit

- * 표준화된 API를 사용하여 다양한 HW 지원.
- * 성능을 유지 하면서 프로그래밍 단순화로 개발기간 단축.
- * 한번 코딩으로 다양한 플랫폼에서 동작하는 관리 효율성.
- * 디버깅, 최적화, 코드 변환툴 제공.

Workload

- Autonomous Driving.
- HPC(Simulation, Chemical, Airflow).
- Energy monitoring and energy Grid and efficiency.
- Oil and Gas accurately identify.
- Genome analysis & Drug Development, P-HIS.
- Robotics – Service, Medical, Delivery.
- Security and Safety
- NLP - Contact center, Voice Service.



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BACKUP